

TREBALL DE FI DE GRAU

Grau en Enginyeria Electrònica Industrial i Automàtica

# **Supervisió, control i simulació d'un procés de producció de cel·lulosa pel mètode de Kraft.**



**Volum II**

Annexes

**Autor:** Bernat Traveria Solà  
**Director:** Javier Francisco Gámiz Caro  
**Departament:** ESAll  
**Convocatòria:** Octubre 2017

## ÍNDEX

<i>CAPÍTOL 1: ANNEXES</i> .....	2
<b>1.1. Programa PLC</b> .....	<b>2</b>
<i>1.1.1. Programa Principal</i> .....	2
<i>1.1.2. Automàtic.</i> .....	86
<i>1.1.3. Simulació.</i> .....	139
<i>1.1.4. Add-On</i> .....	174
<i>1.1.5. Data type</i> .....	210



# **CAPÍTOL 1:**

# **ANNEXES**

En aquest capítol està inclosa tota la programació que s'ha realitzat amb RSlogix5000 per la realització del treball de fi de grau.

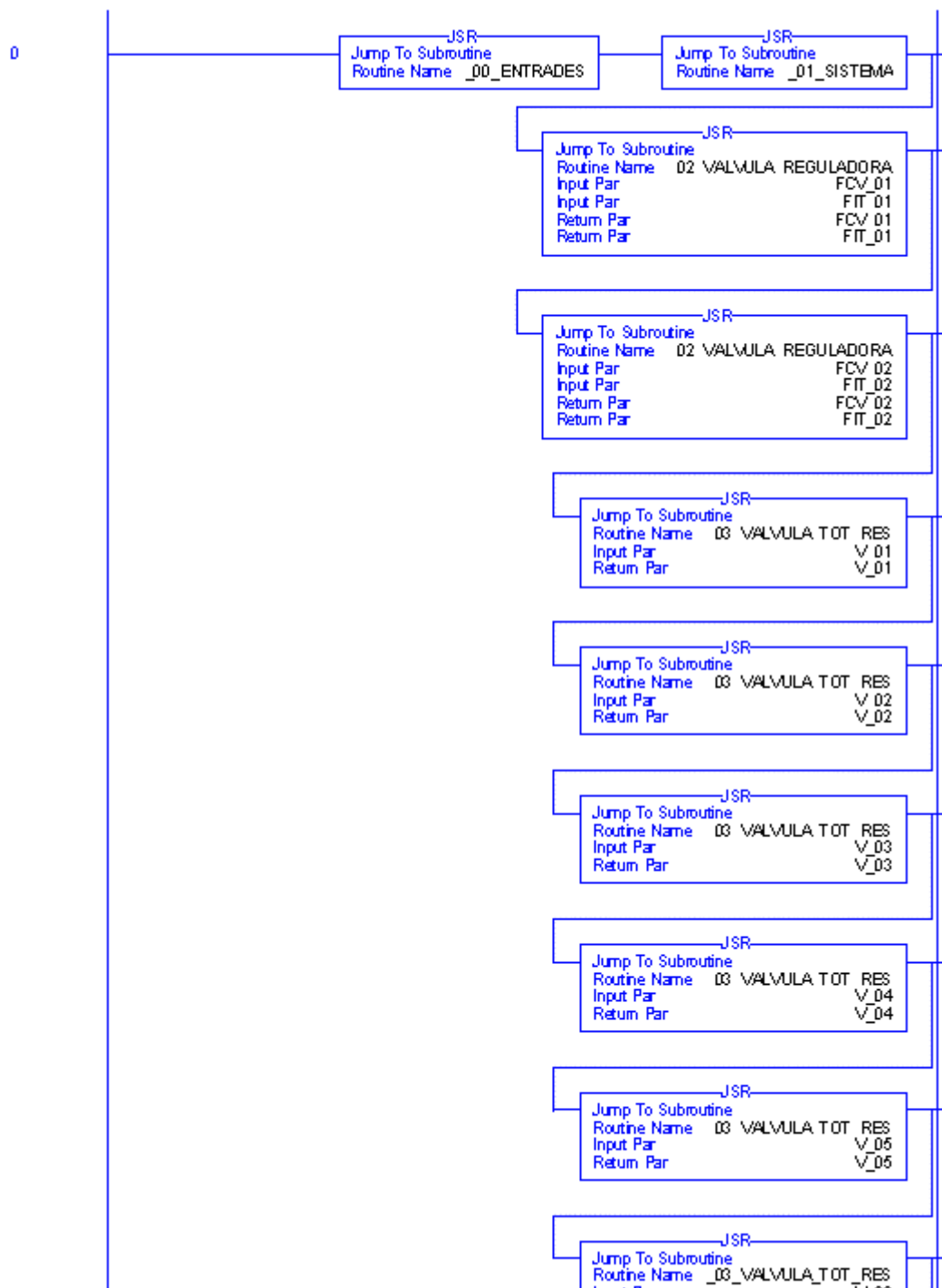
## **1.1.Programa PLC**

### **1.1.1. Programa Principal**

## **MAIN ROUTINE**

mainRoutine - Ladder Diagram  
 fgb0:MainTask.MainProgram  
 Total number of rungs in routine: 1

Page 101  
 01/01/2017 14:19:11  
 C:\Documents and Settings\Administrador\Escritori\fgb0.ACD

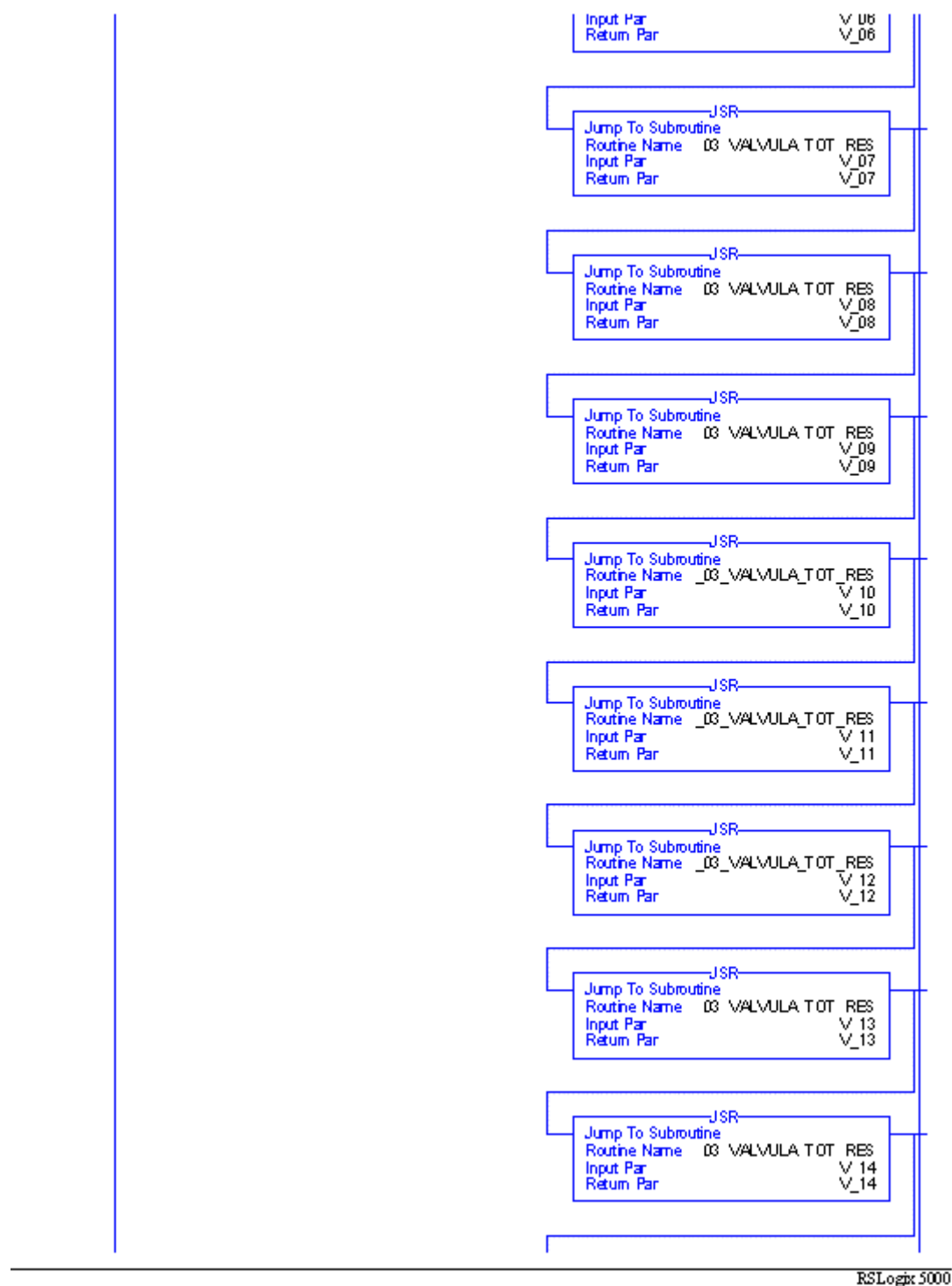


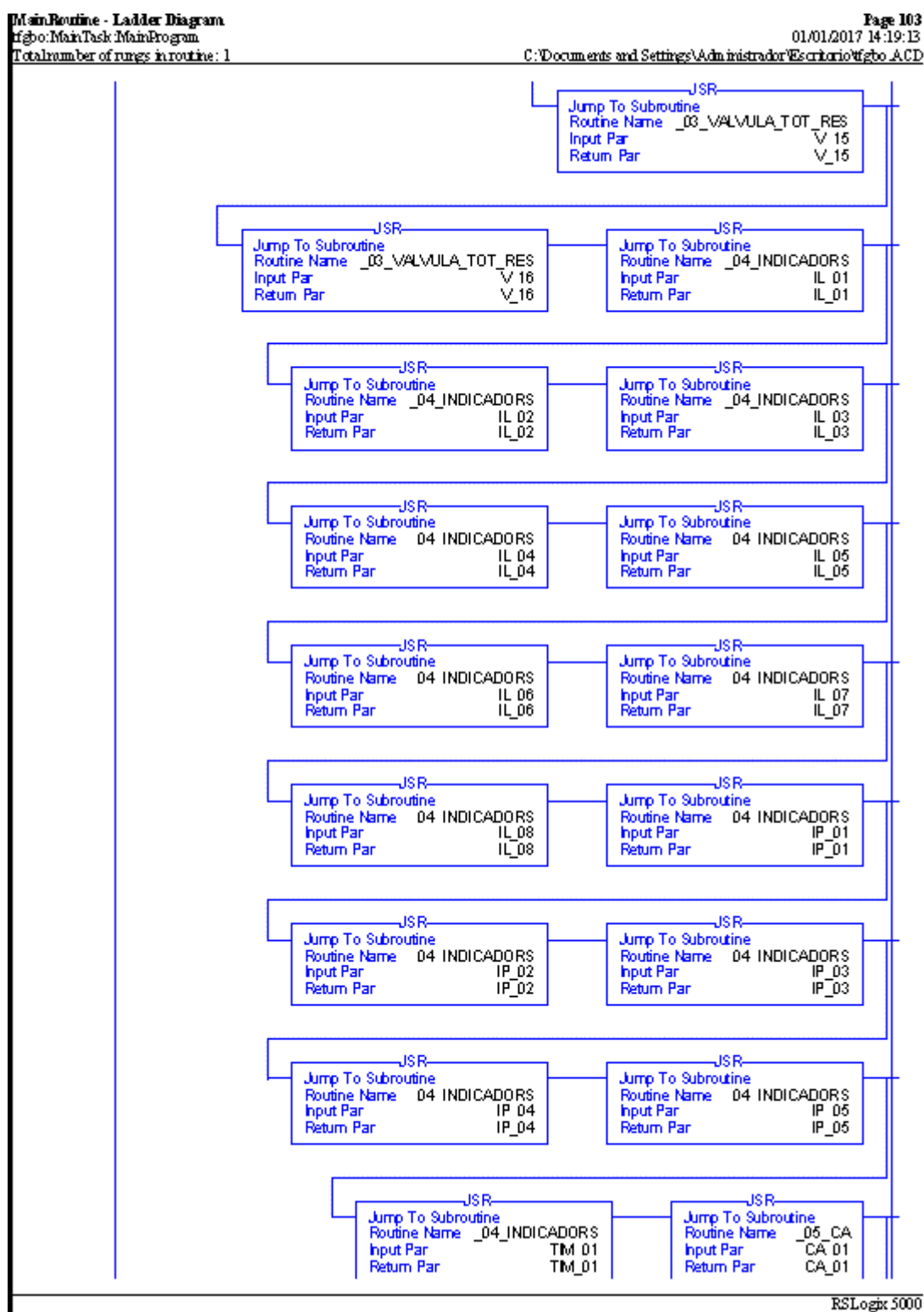
RSLogix 5000

figbo:MainTask:MainProgram  
Total number of rungs in routine: 1

01/01/2017 14:19:12

C:\Documents and Settings\Administrador\Escritorio\figbo.ACD





Main Routine - Ladder Diagram

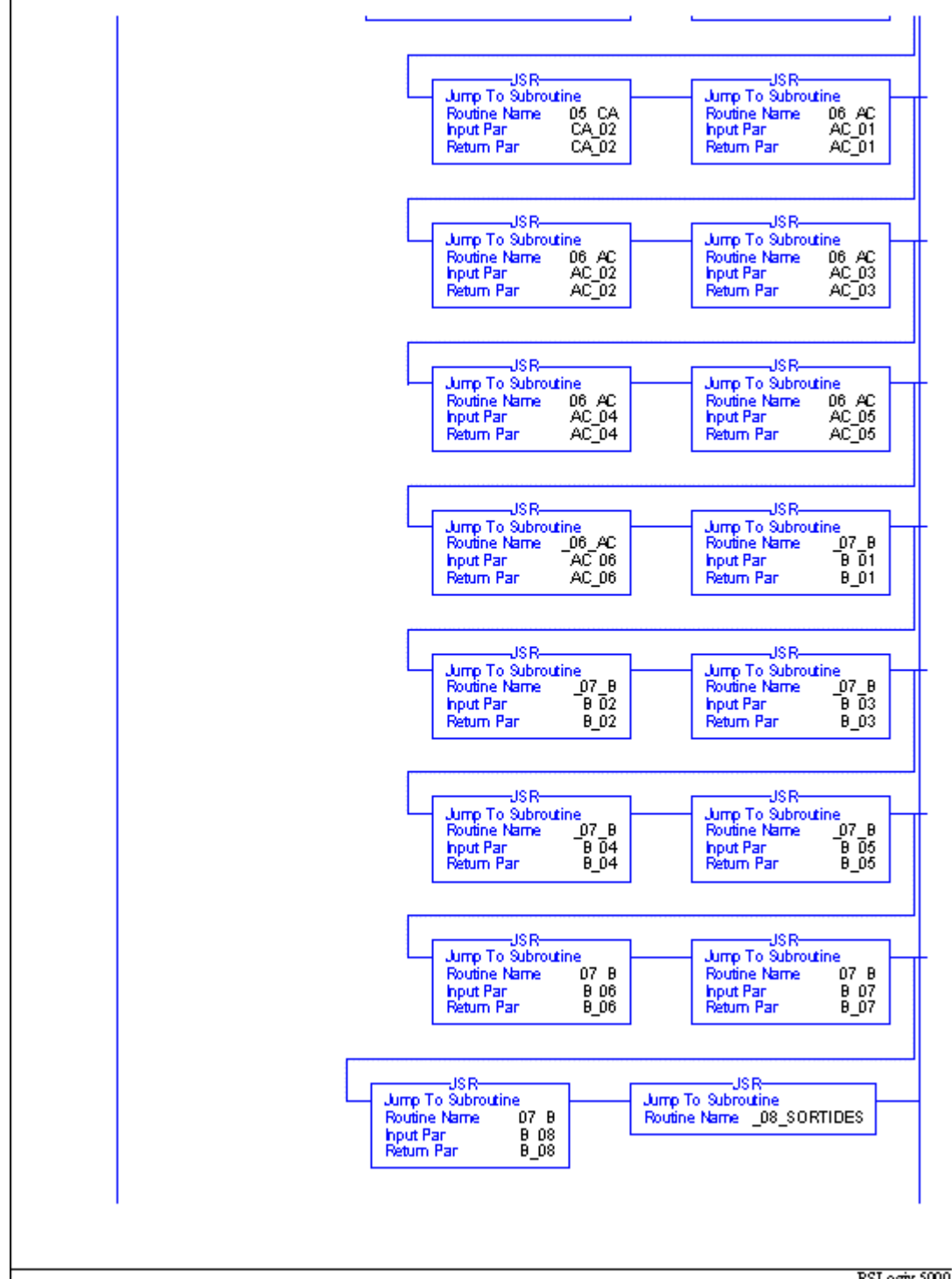
Page 104

tfgbo:MainTask:MainProgram

01/01/2017 14:19:14

Total number of rungs in routine: 1

C:\Documents and Settings\Administrador\Escritorio\tfgbo\_ACD

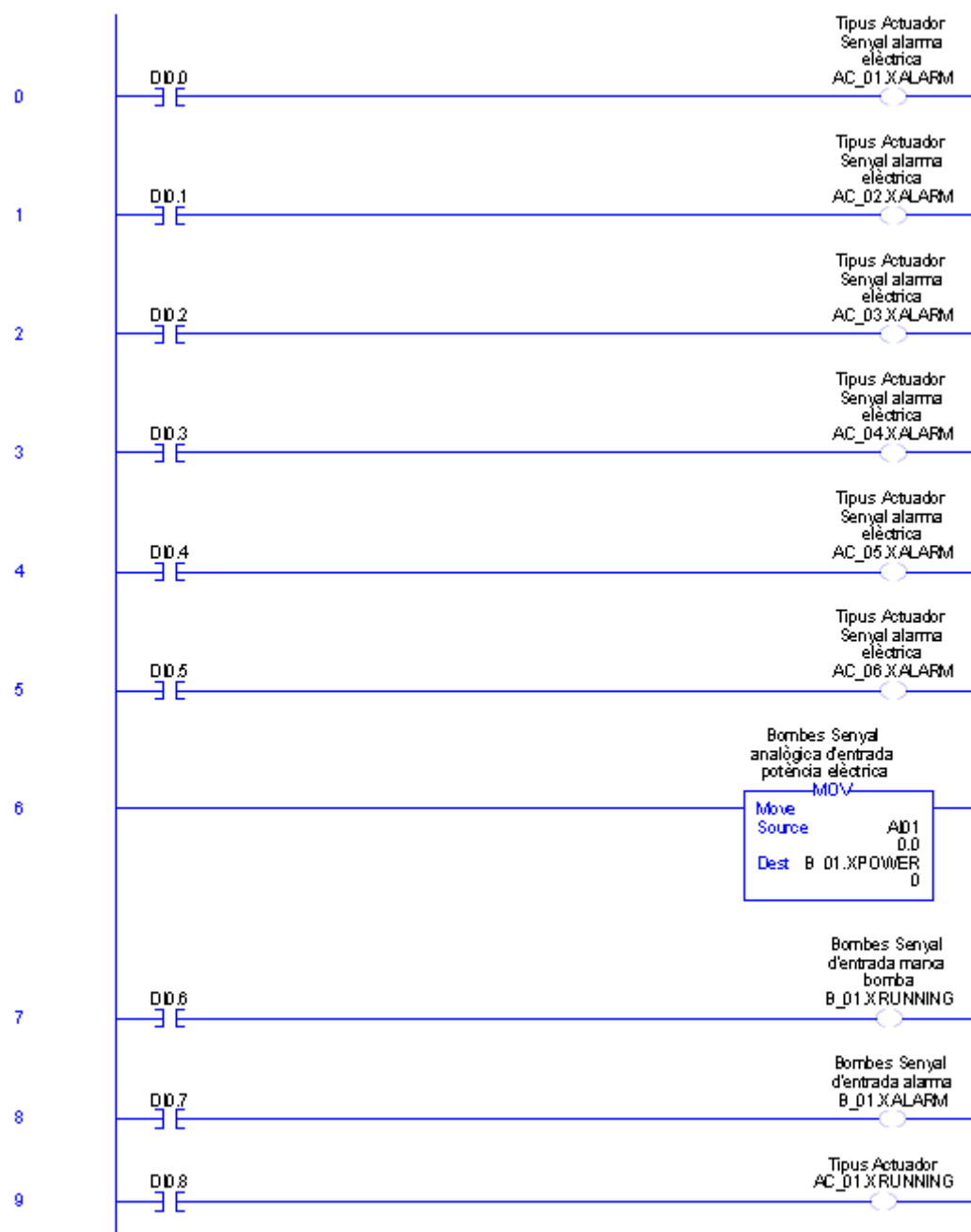




## **ENTRADES**

00\_ENVIARMS - Ladder Diagram  
 fgho:MainTask:MainProgram  
 Total number of rungs in routine: 116

Page 100  
 01/01/2017 14:19:15  
 C:\Documents and Settings\Administrador\Escritorio\fgbo.ACD



ESLogix 5000

## 00\_ENTRADES - Ladder Diagram

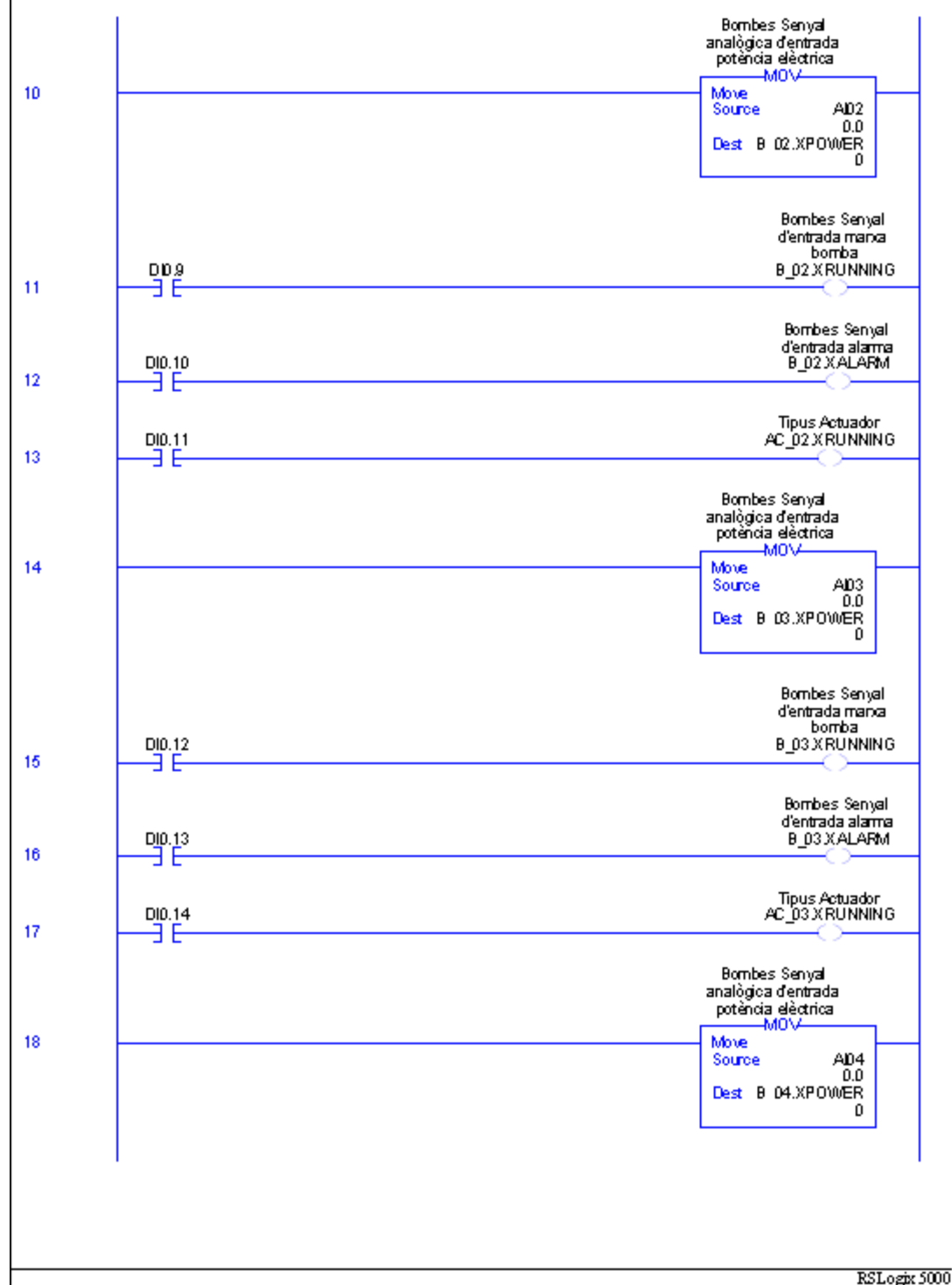
figbo:MainTask:MainProgram

Total number of rungs in routine: 116

Page 107

01/01/2017 14:19:16

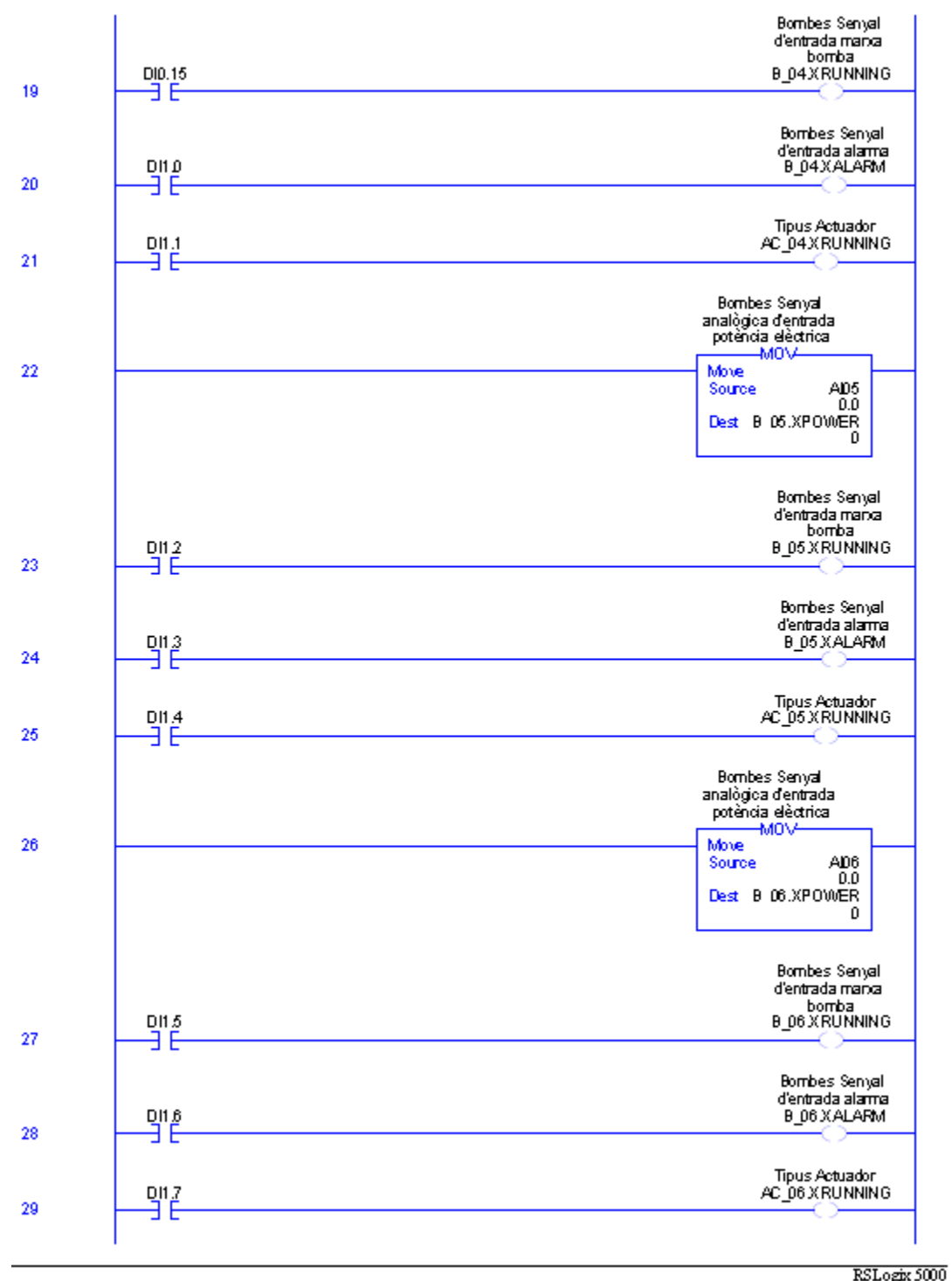
C:\Documents and Settings\Administrador\Escritori\figbo.ACD

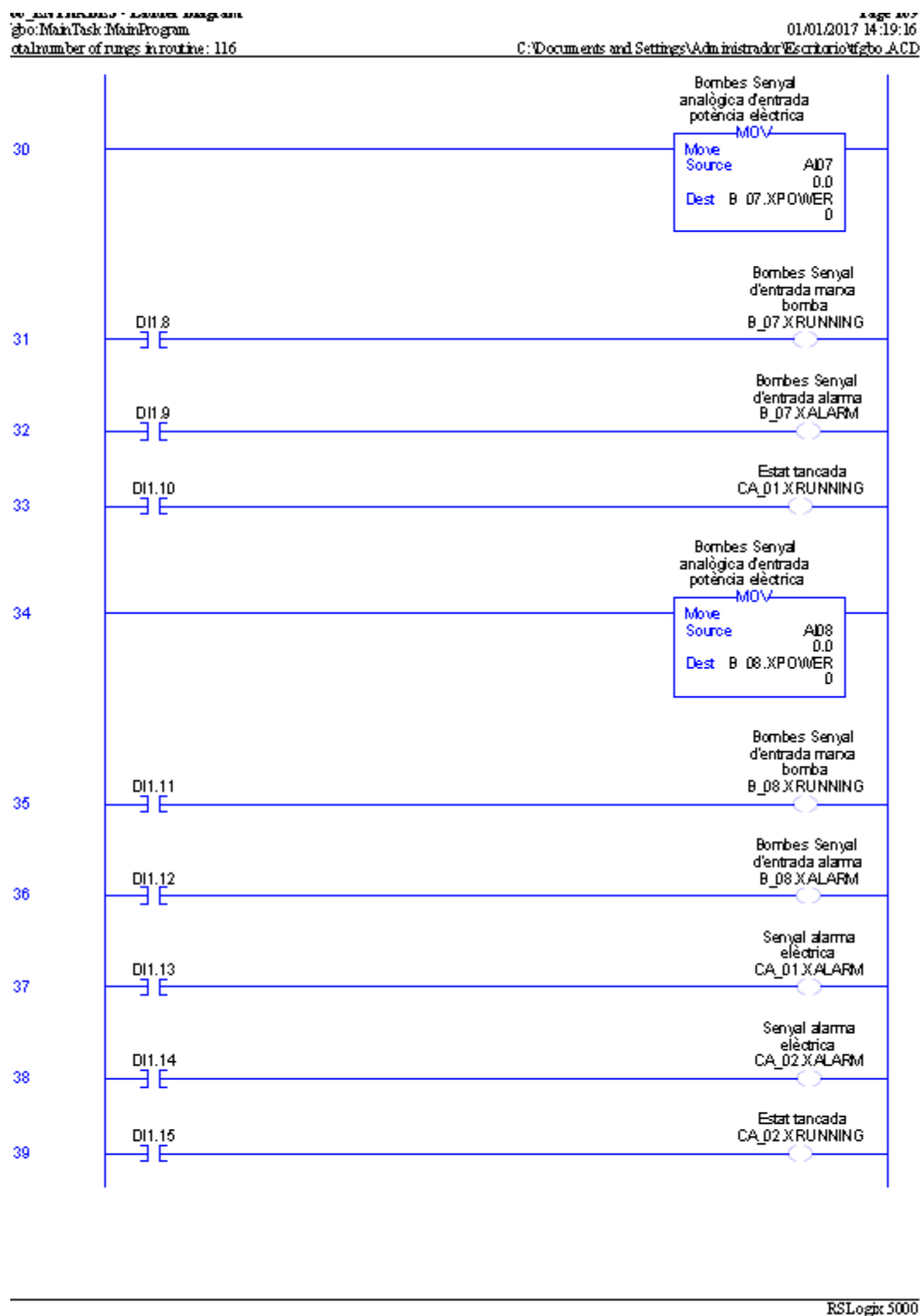


RSLogix 5000

U0\_AVIATUMES - Ladder Diagram  
 Iqbo:MainTask:MainProgram  
 Total number of rungs in routine: 116

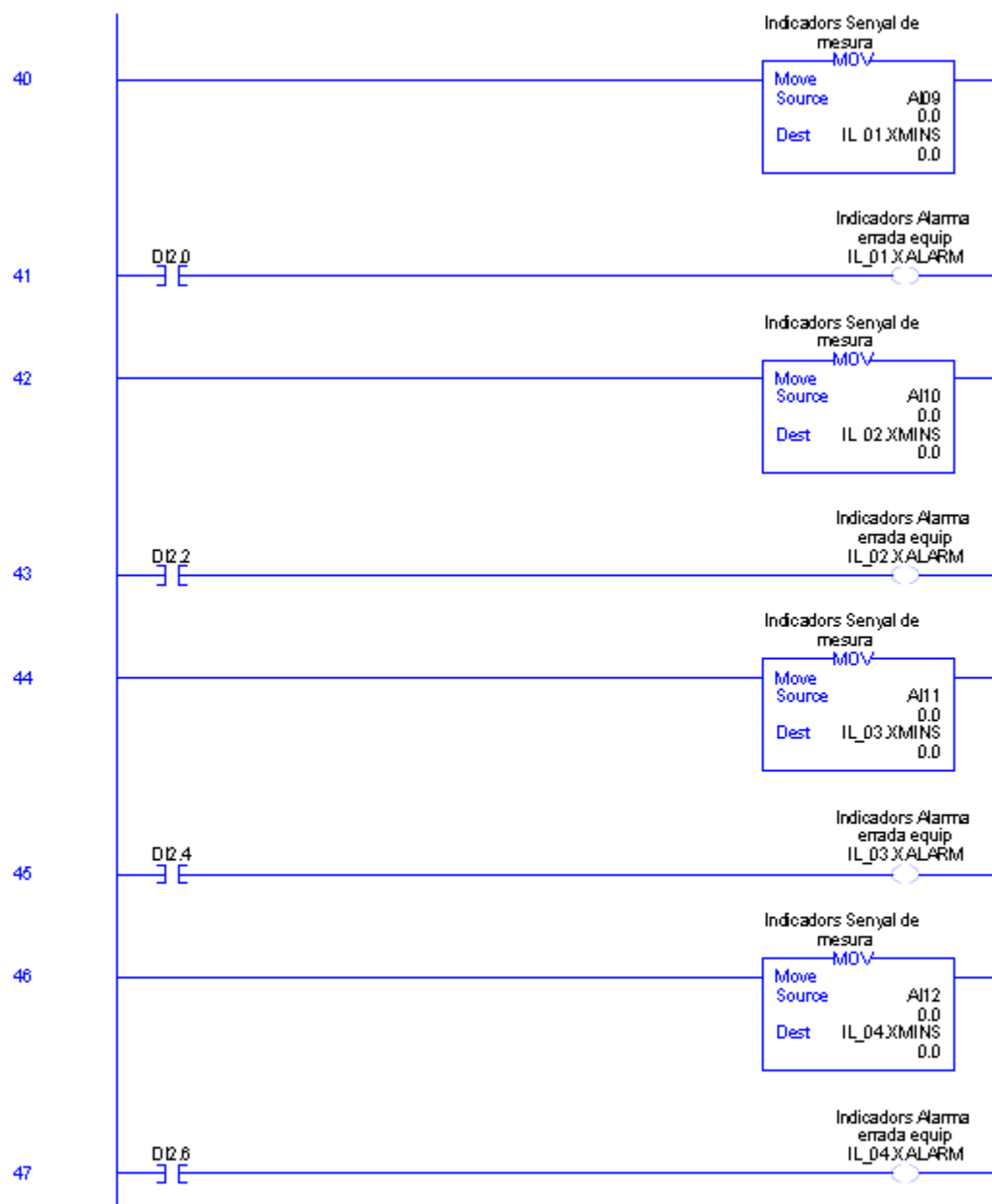
Page 108  
 01/01/2017 14:19:16  
 C:\Documents and Settings\Administrador\Escriptorio\Iqbo\_ACD





00\_ENTRADES - Ladder Diagram  
 fgb0:MainTask:MainProgram  
 Total number of rungs in routine: 116

Page 110  
 01/01/2017 14:19:16  
 C:\Documents and Settings\Administrador\Escritorio\fgbo\_ACD



RSLogix 5000

## 00\_ENTRADES - Ladder Diagram

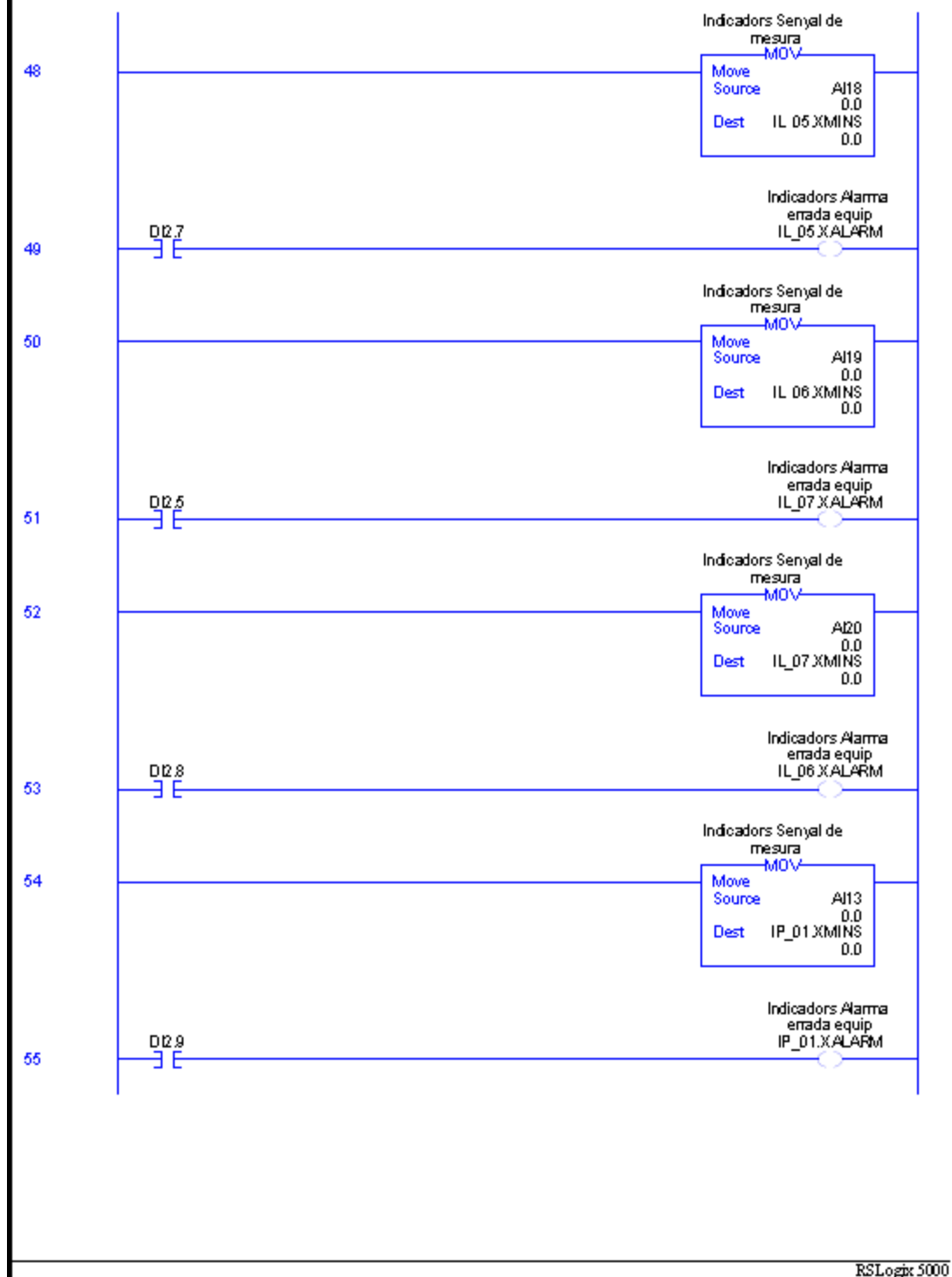
Figbo:MainTask:MainProgram

Total number of rungs in routine: 116

Page 111

01/01/2017 14:19:17

C:\Documents and Settings\Administrador\Escritori\Figbo.ACD



00\_RN1RALES - Ladder Diagram

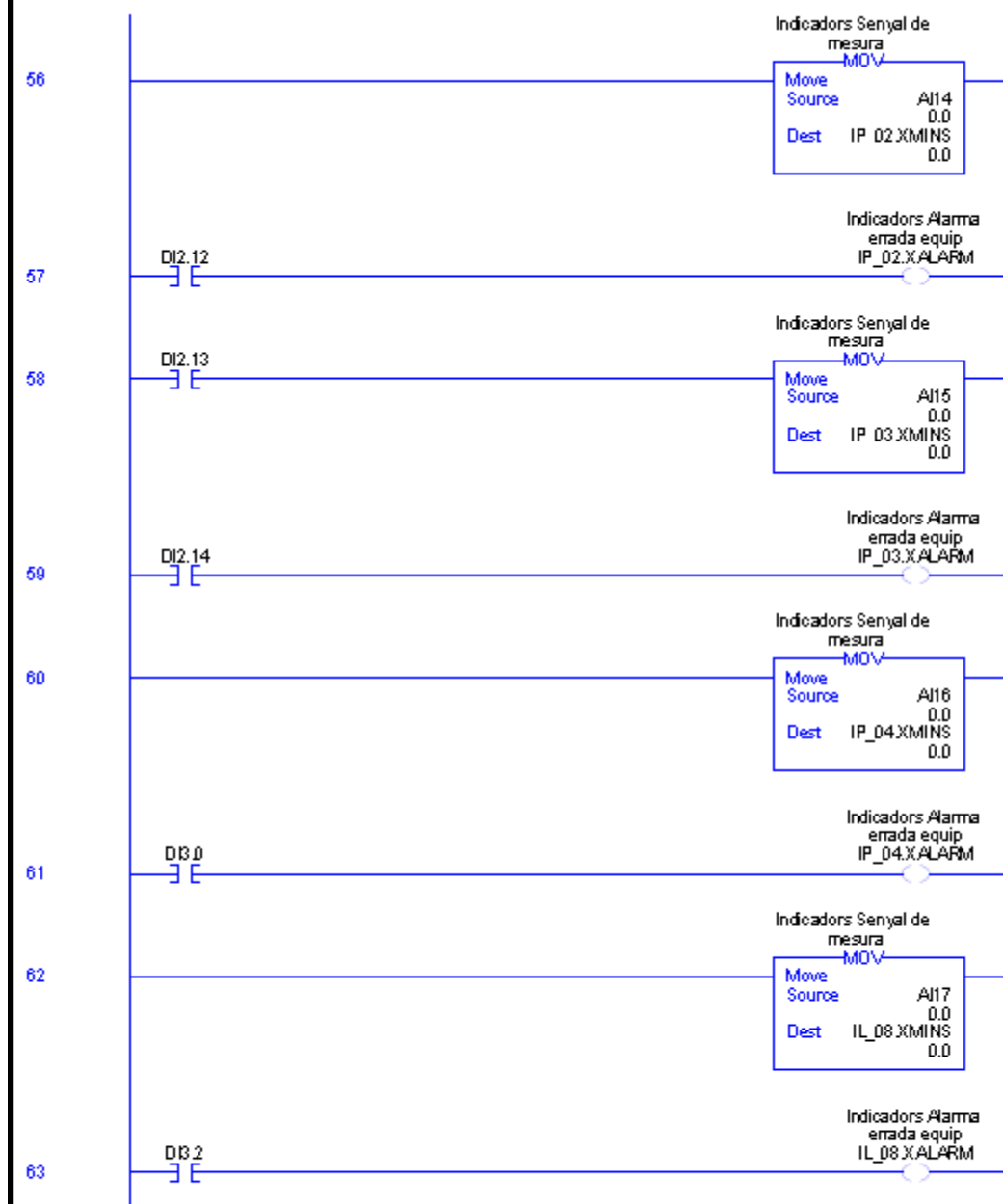
Figbo/MainTask/MainProgram

Total number of rungs in routine: 116

Page 112

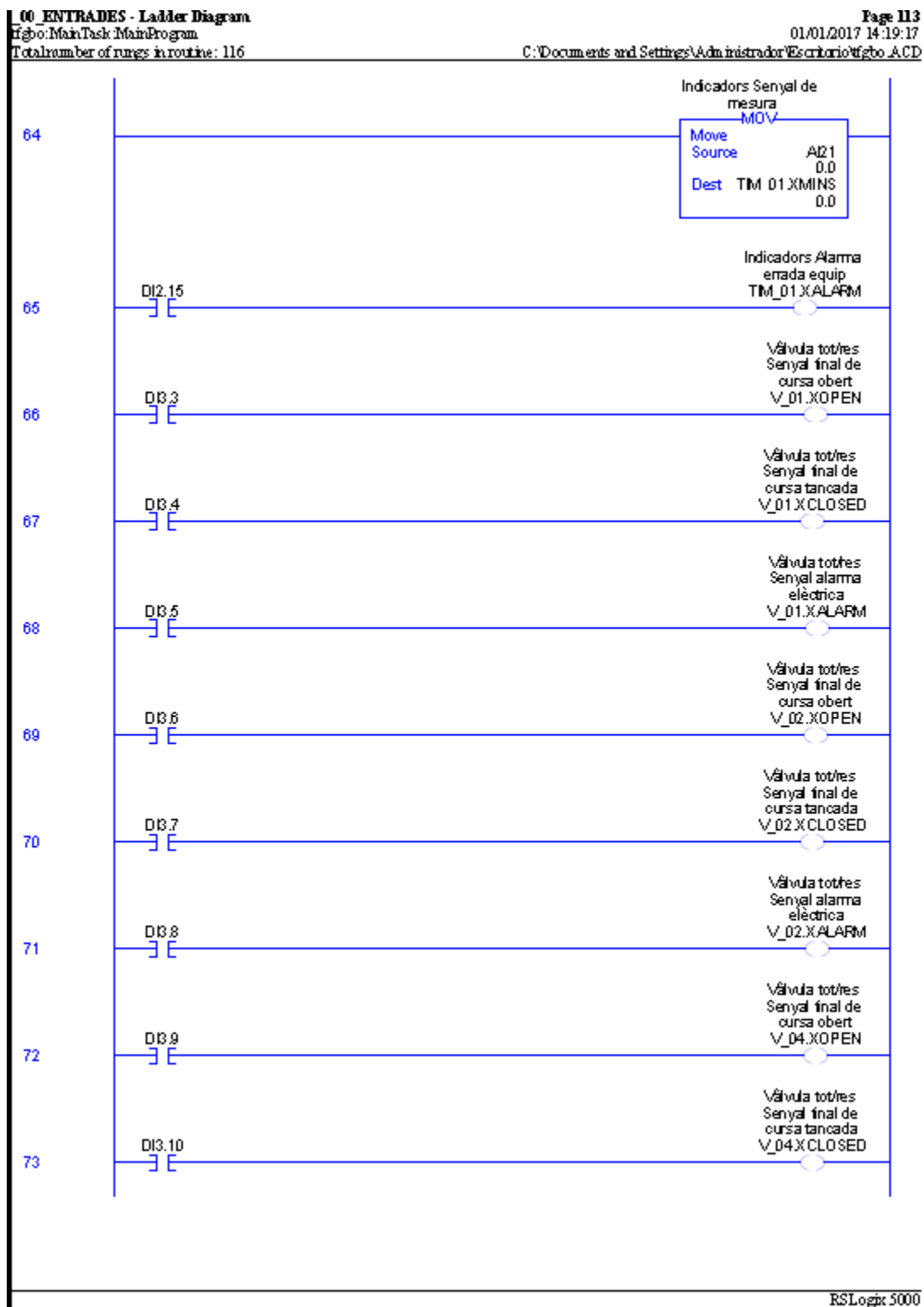
01/01/2017 14:19:17

C:\Documents and Settings\Administrador\Escritorio\Figbo.ACD



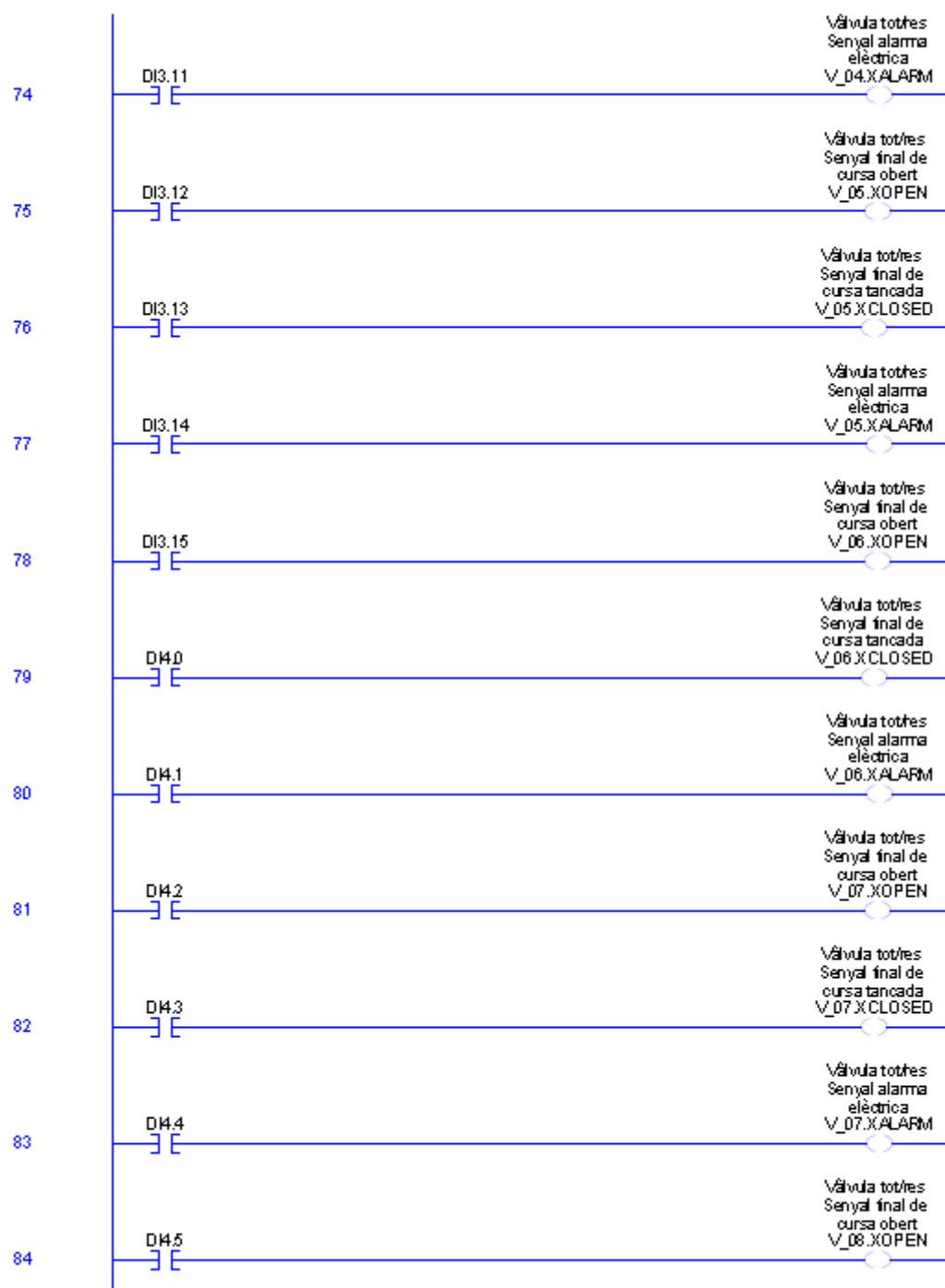
RSLogix 5000





W\_ANNEXES - Ladder Diagram  
 fgho:MainTask:MainProgram  
 Total number of rungs in routine: 116

Page 114  
 01/01/2017 14:19:17  
 C:\Documents and Settings\Administrador\Escritorio\Wfgho.ACD



RSLogix 5000

## 00\_ENTRADES - Ladder Diagram

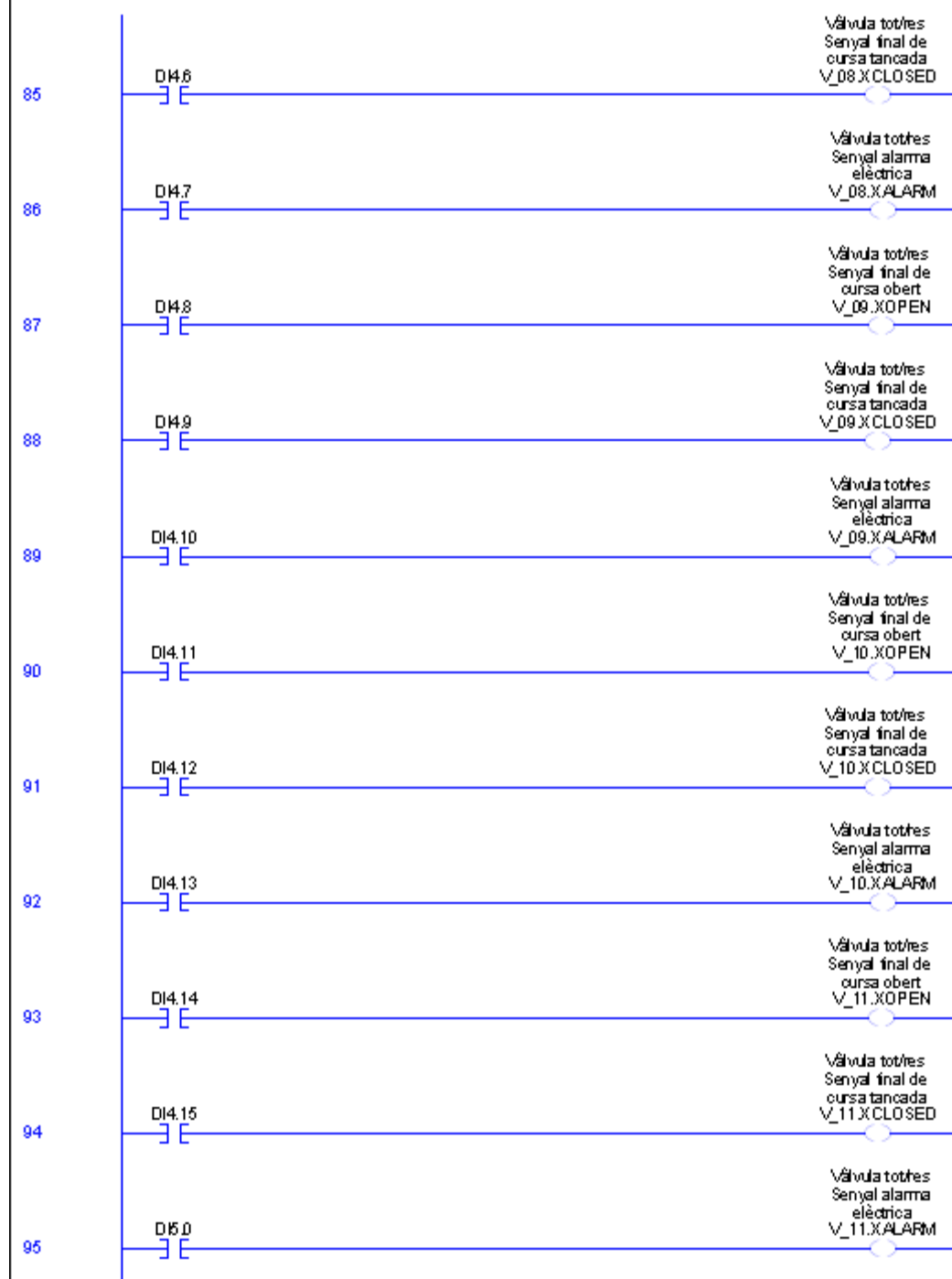
Figbo.MainTask.MainProgram

Total number of rungs in routine: 116

Page 115

01/01/2017 14:19:18

C:\Documents and Settings\Administrador\Escritori\figbo.ACD



RSLogix 5000

## 00\_ENTRADES - Ladder Diagram

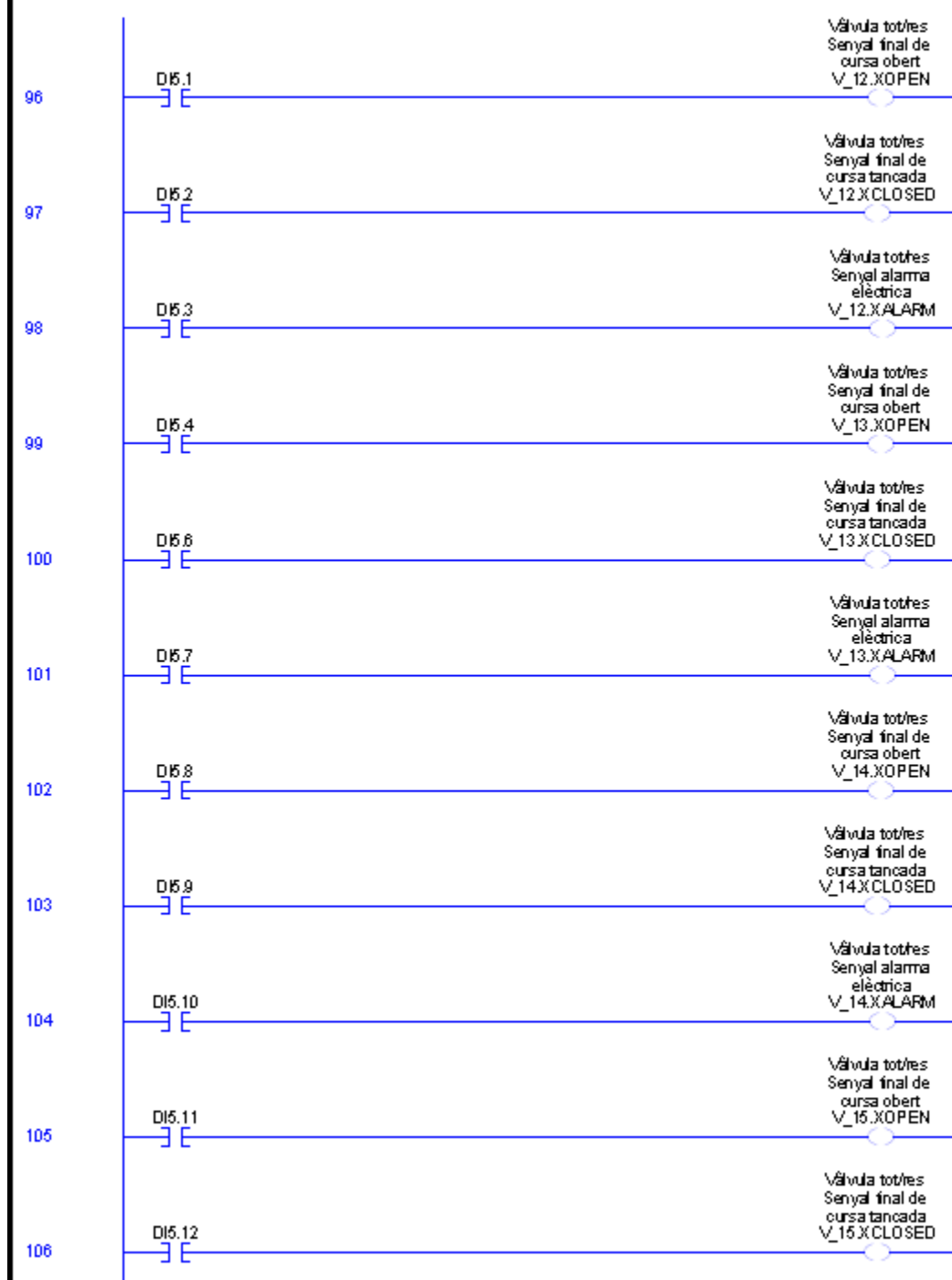
Figbo:MainTask:MainProgram

Total number of rungs in routine: 116

Page 116

01/01/2017 14:19:18

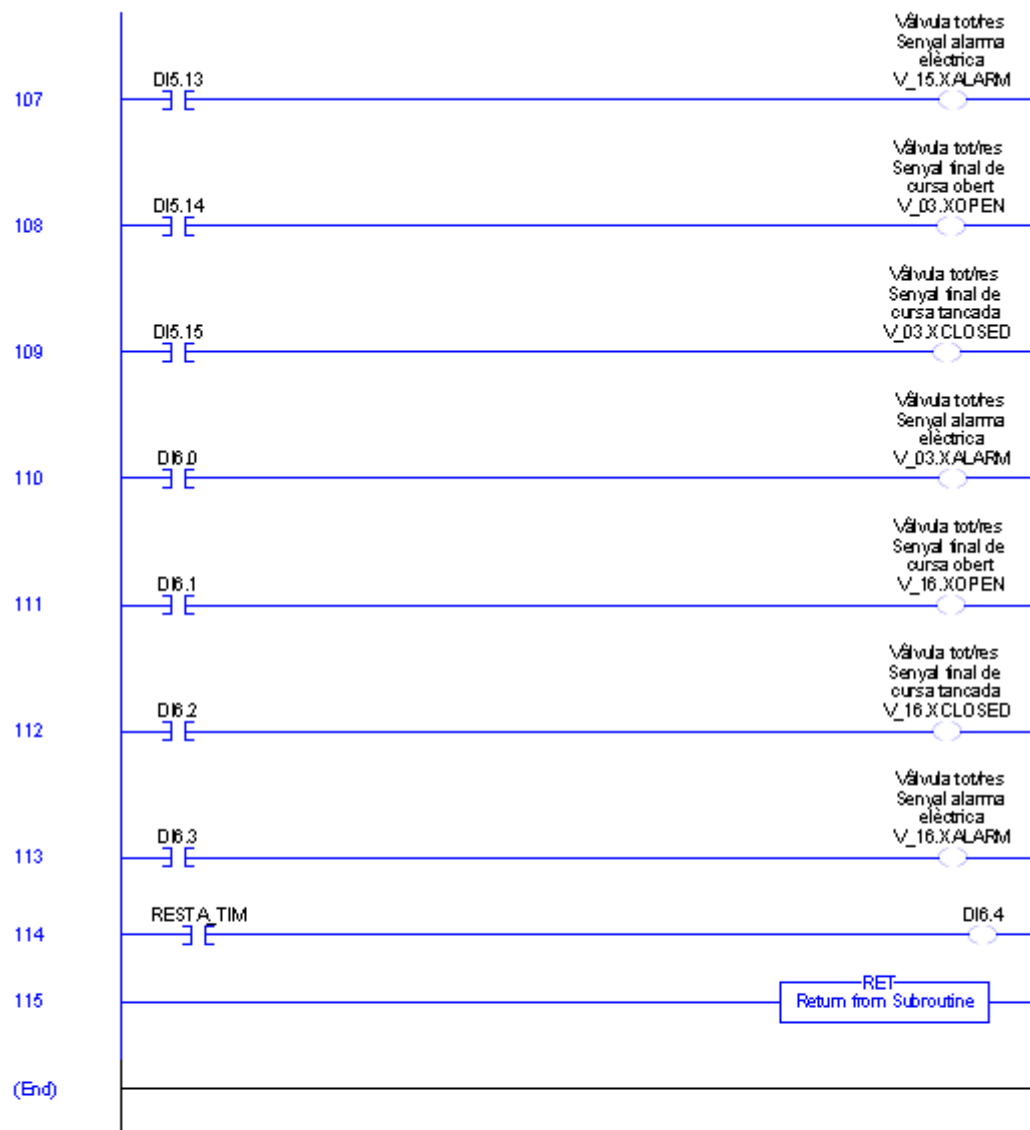
C:\Documents and Settings\Administrador\Escritorio\Figbo.ACD



RSLogix 5000

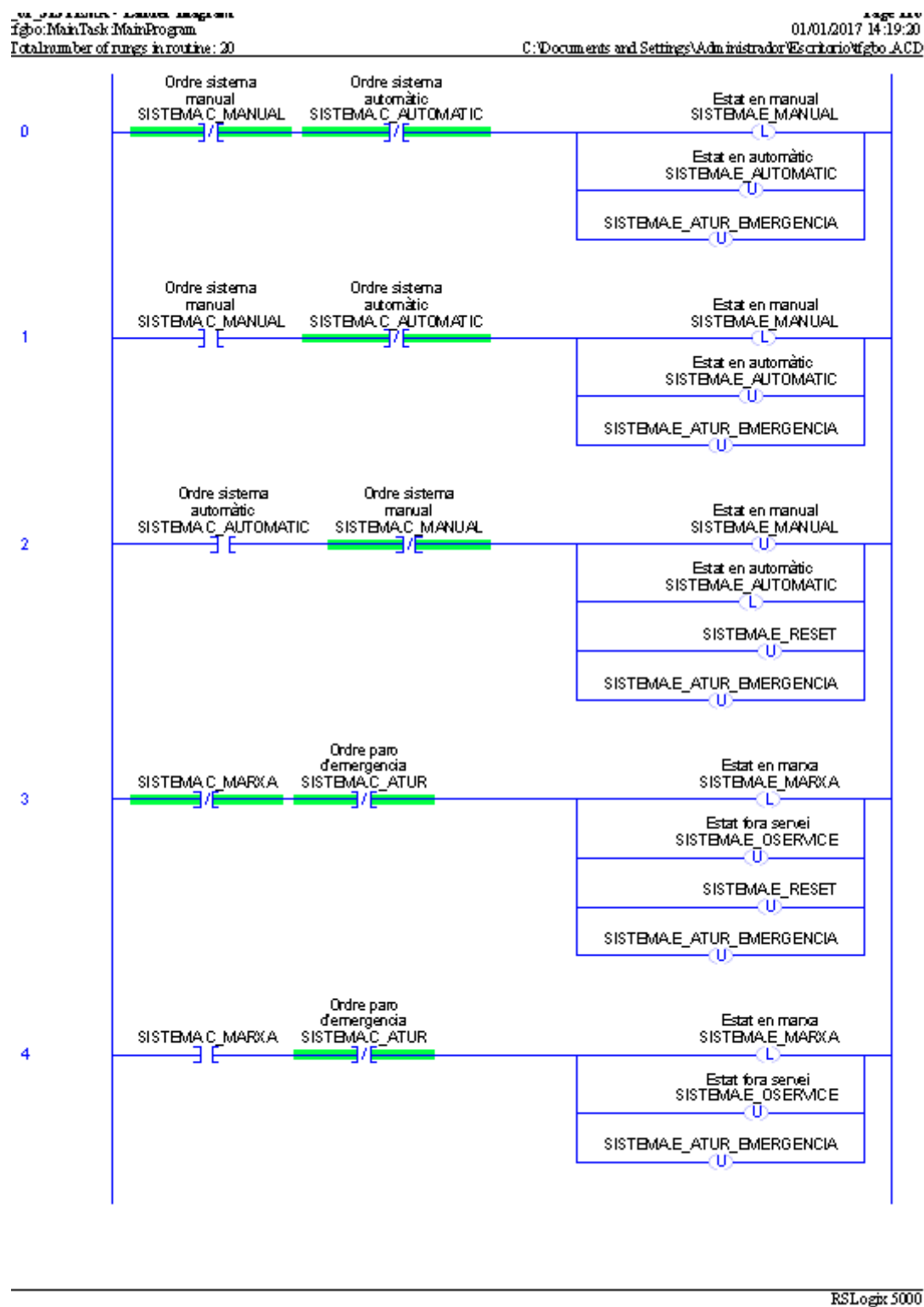
00\_RV1RAUES - Ladder Diagram  
 Logo: MainTask MainProgram  
 Total number of rungs in routine: 116

Page 11/7  
 01/01/2017 14:19:18  
 C:\Documents and Settings\Administrador\Escritorio\Kfibo\_ACD



RSLogix 5000

## **SISTEMA**



**\_01 SISTEMA - Ladder Diagram**

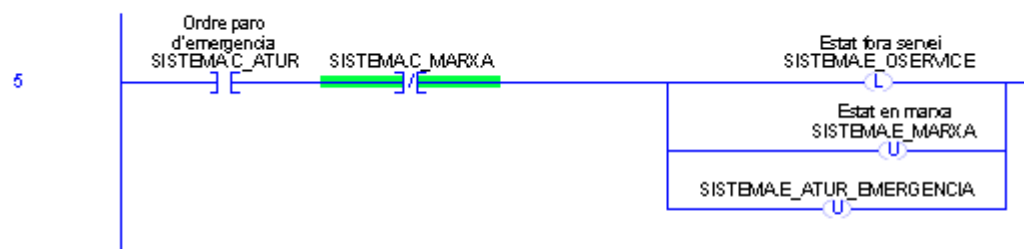
fjgbo:MainTask:MainProgram

Total number of rungs in routine: 20

**Page 119**

01/01/2017 14:19:20

C:\Documents and Settings\Administrador\Escritorio\fjgbo\_ACD

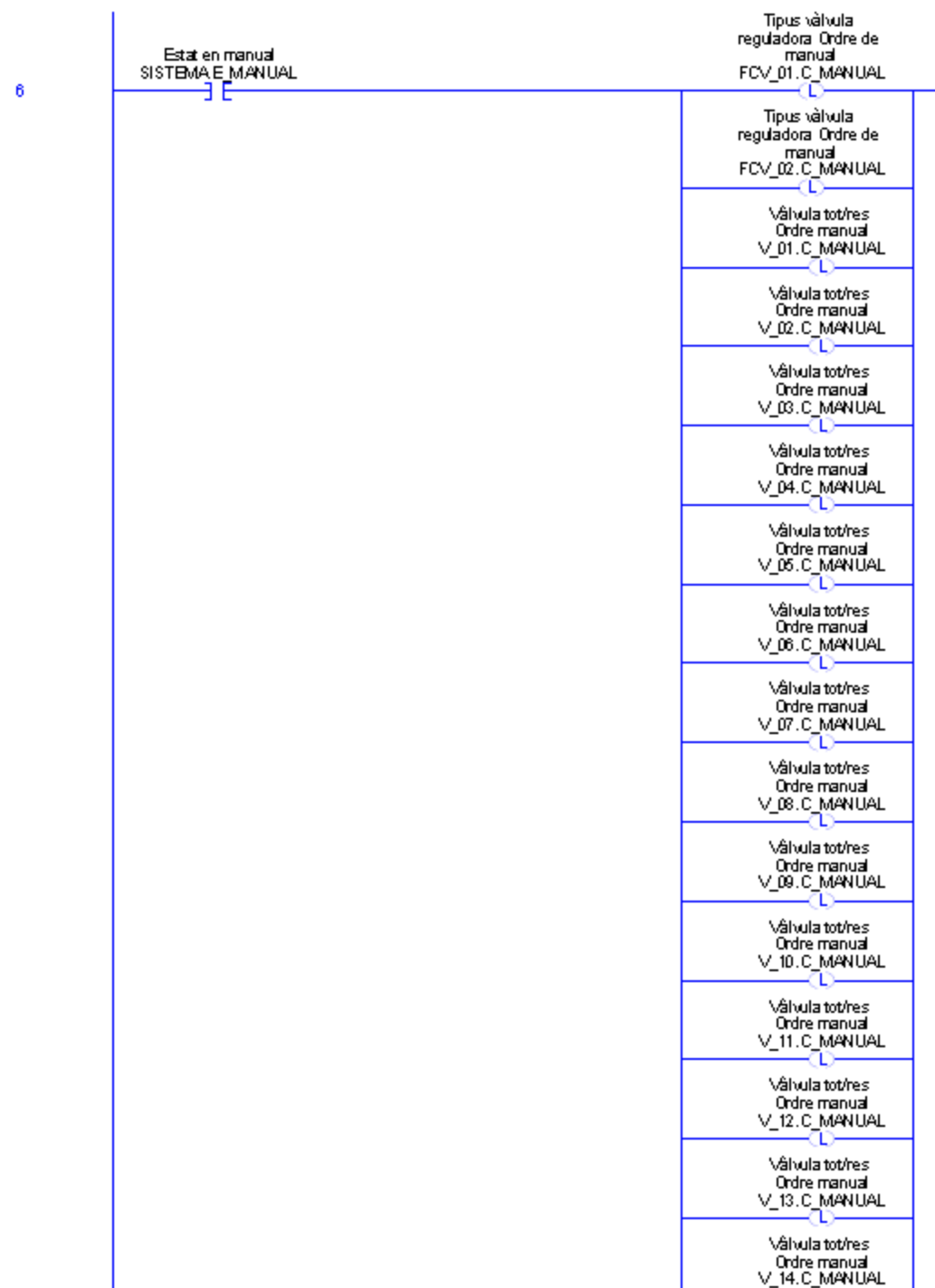




UI\_3131.RMA - Ladder Diagram  
 fgho:MainTask:MainProgram  
 Total number of rungs in routine: 20

Page 120  
 01/01/2017 14:19:20

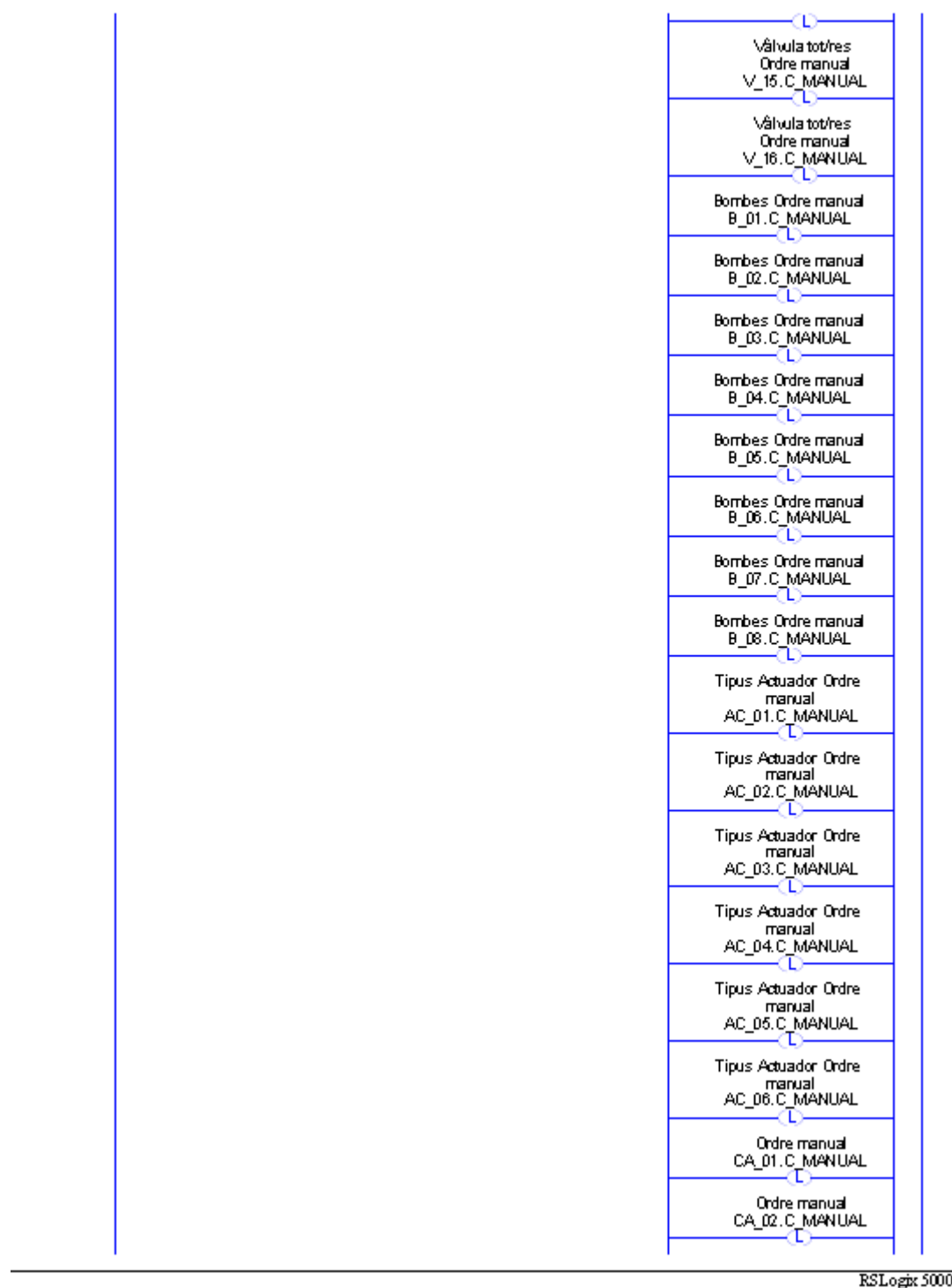
C:\Documents and Settings\Administrador\Escritori\fgbo.ACD



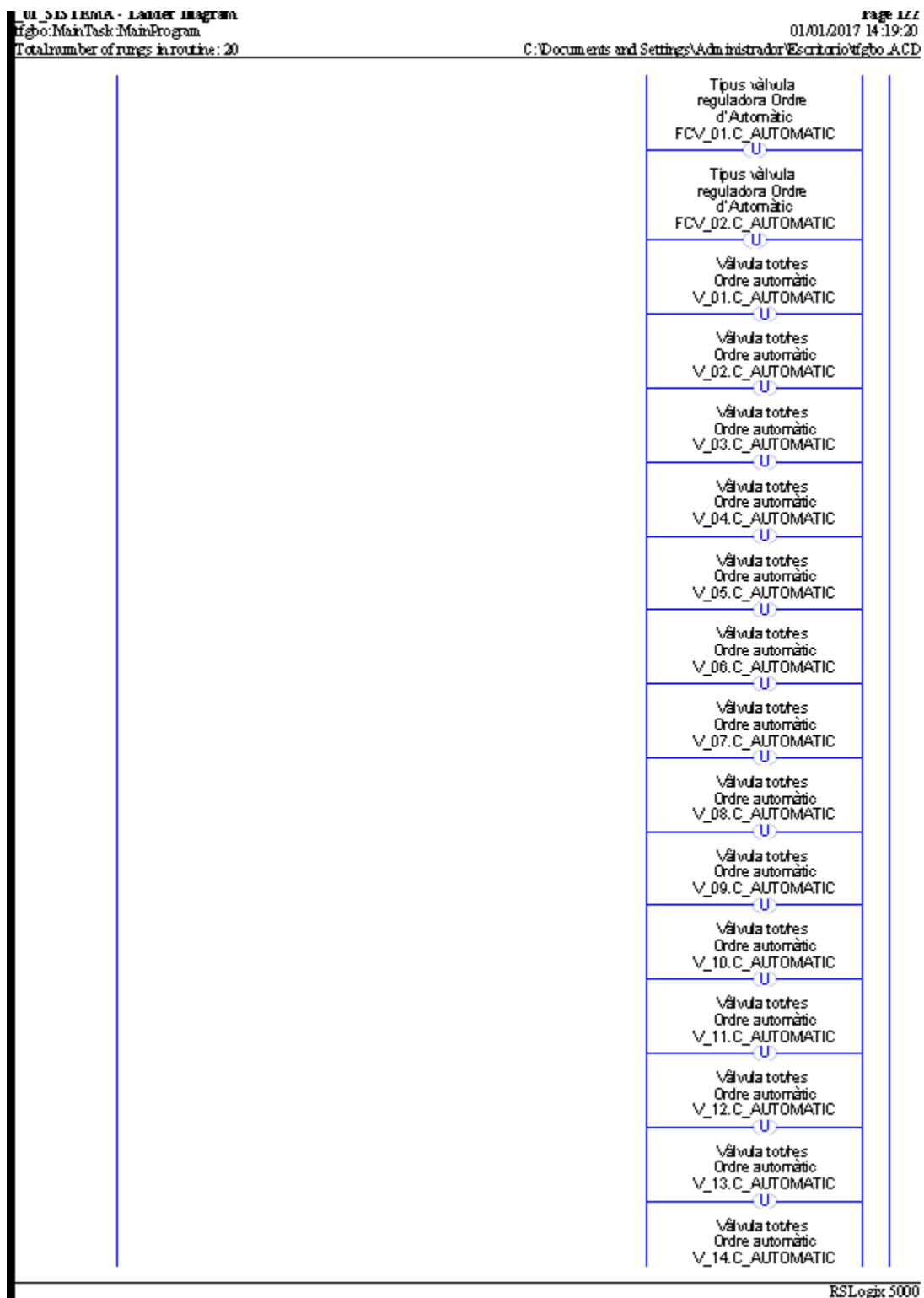
RSLogix 5000

01 SISTEMA - Ladder Diagram  
 fgb0:MainTask.MainProgram  
 Total number of rungs in routine: 20

Page 121  
 01/01/2017 14:19:20  
 C:\Documents and Settings\Administrador\Escritorio\fgb0.ACD

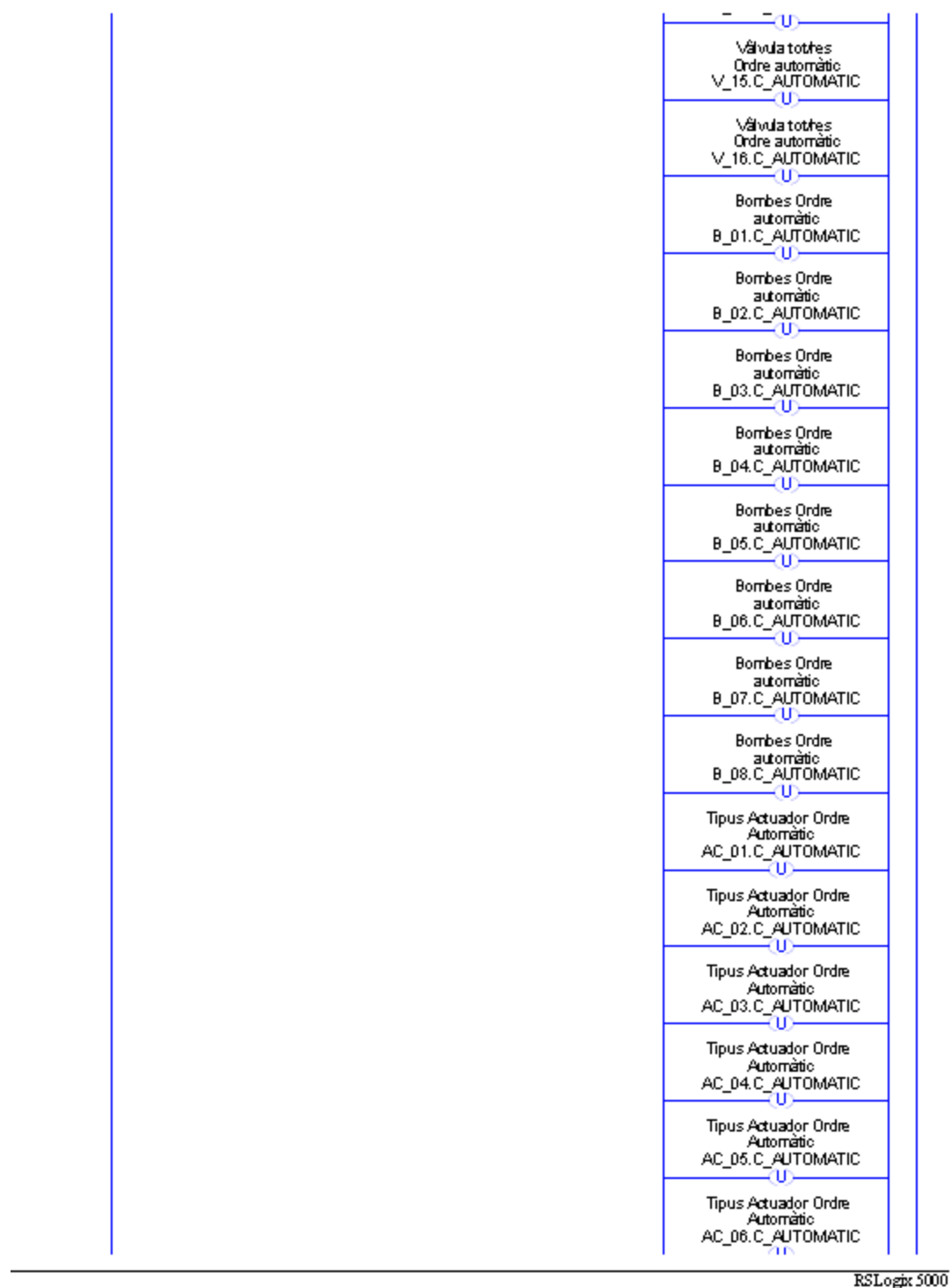


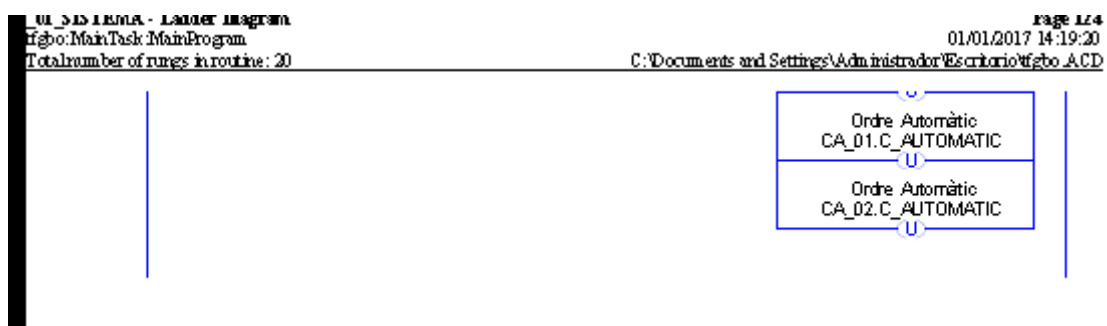
RSLogix 5000



UI\_3131.RNA - Ladder Diagram  
 fgho:MainTask:MainProgram  
 Total number of rungs in routine: 20

Page 123  
 01/01/2017 14:19:20  
 C:\Documents and Settings\Administrador\Escritorio\fgbo.ACD







UI 3.0.1.RUNA - Ladder Diagram

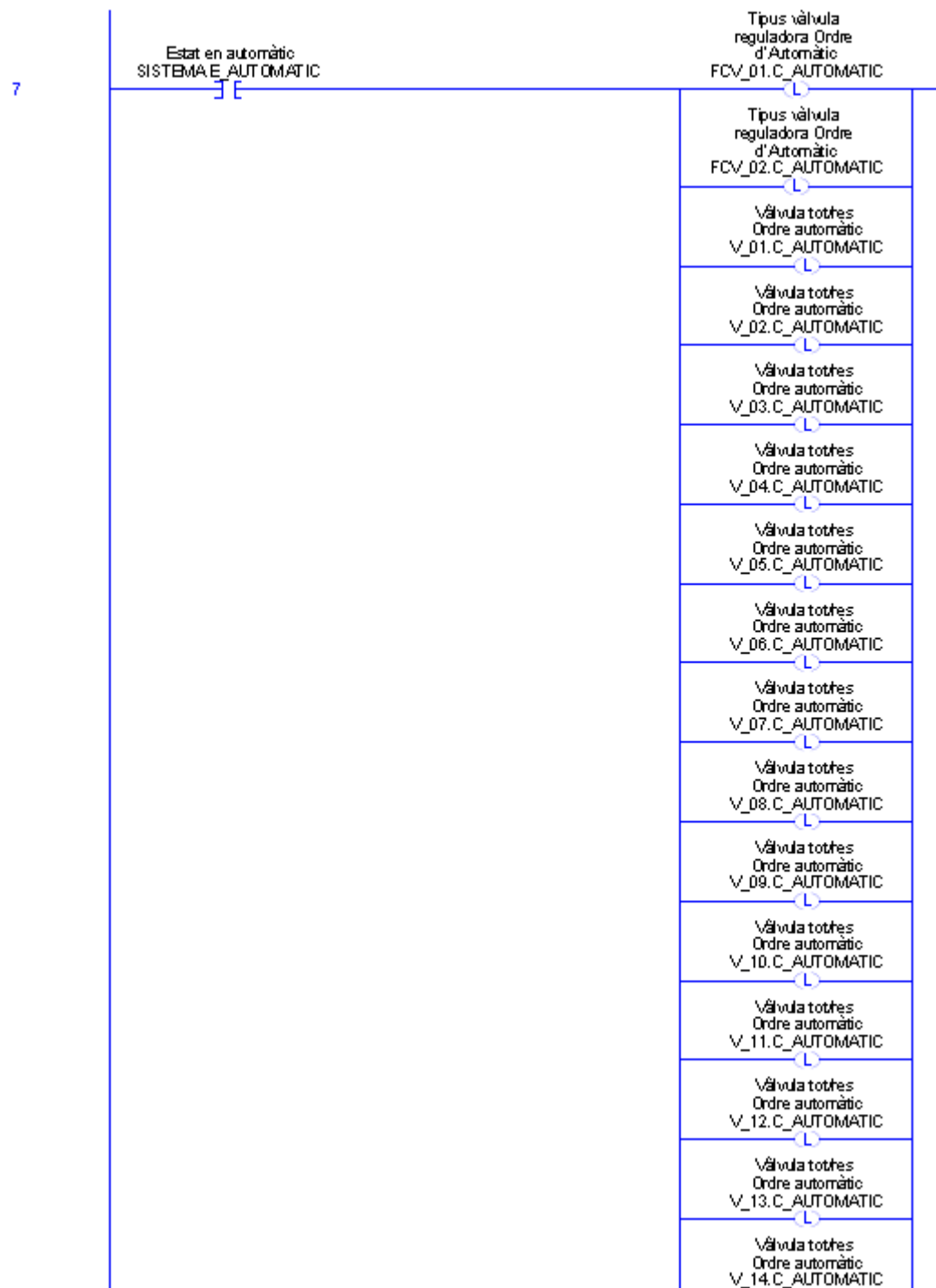
fibo:MainTask:MainProgram

Total number of rungs in routine: 20

Page 125

01/01/2017 14:19:20

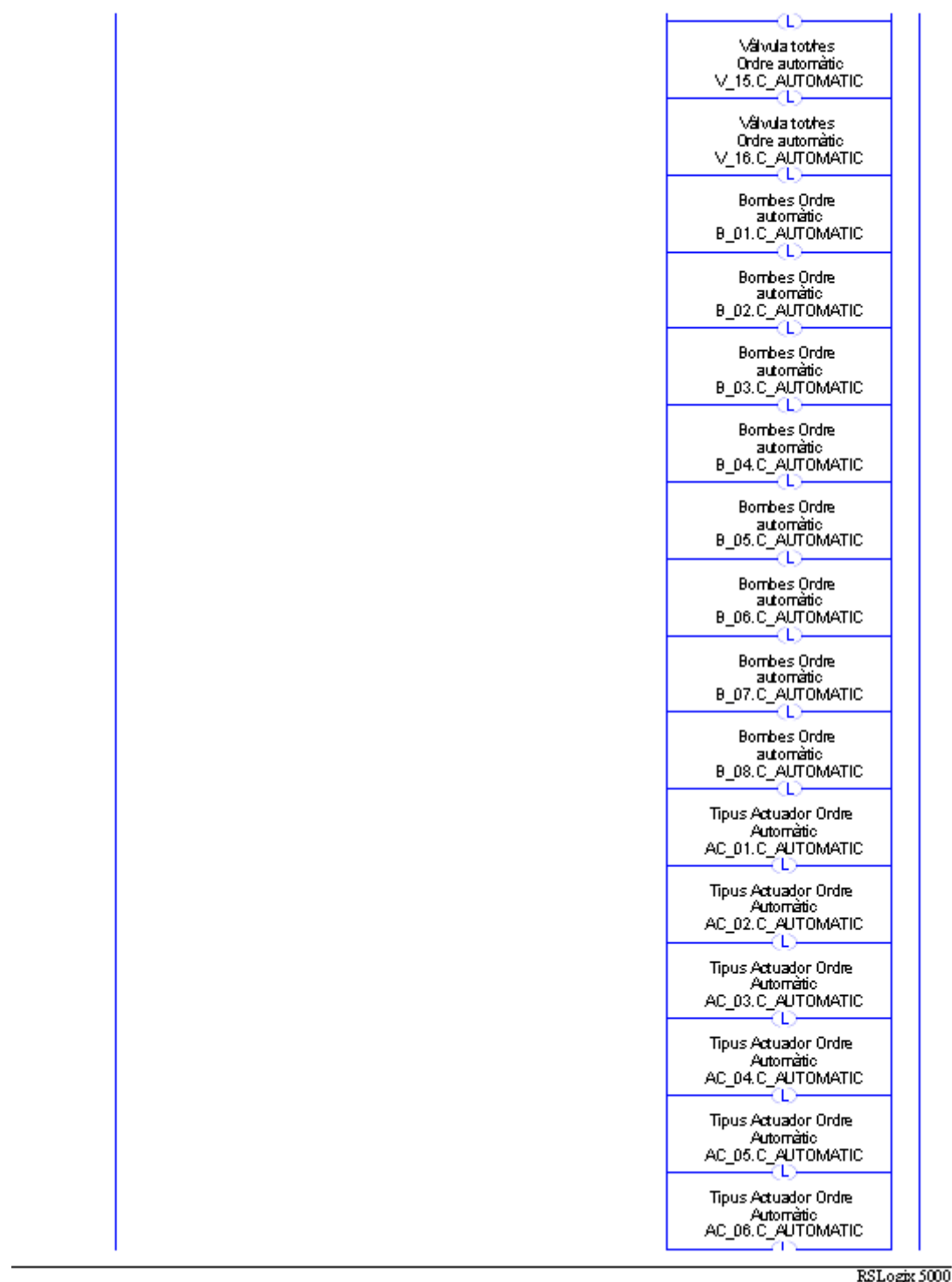
C:\Documents and Settings\Administrador\Escritori\ufibo.ACD



RSLogix 5000

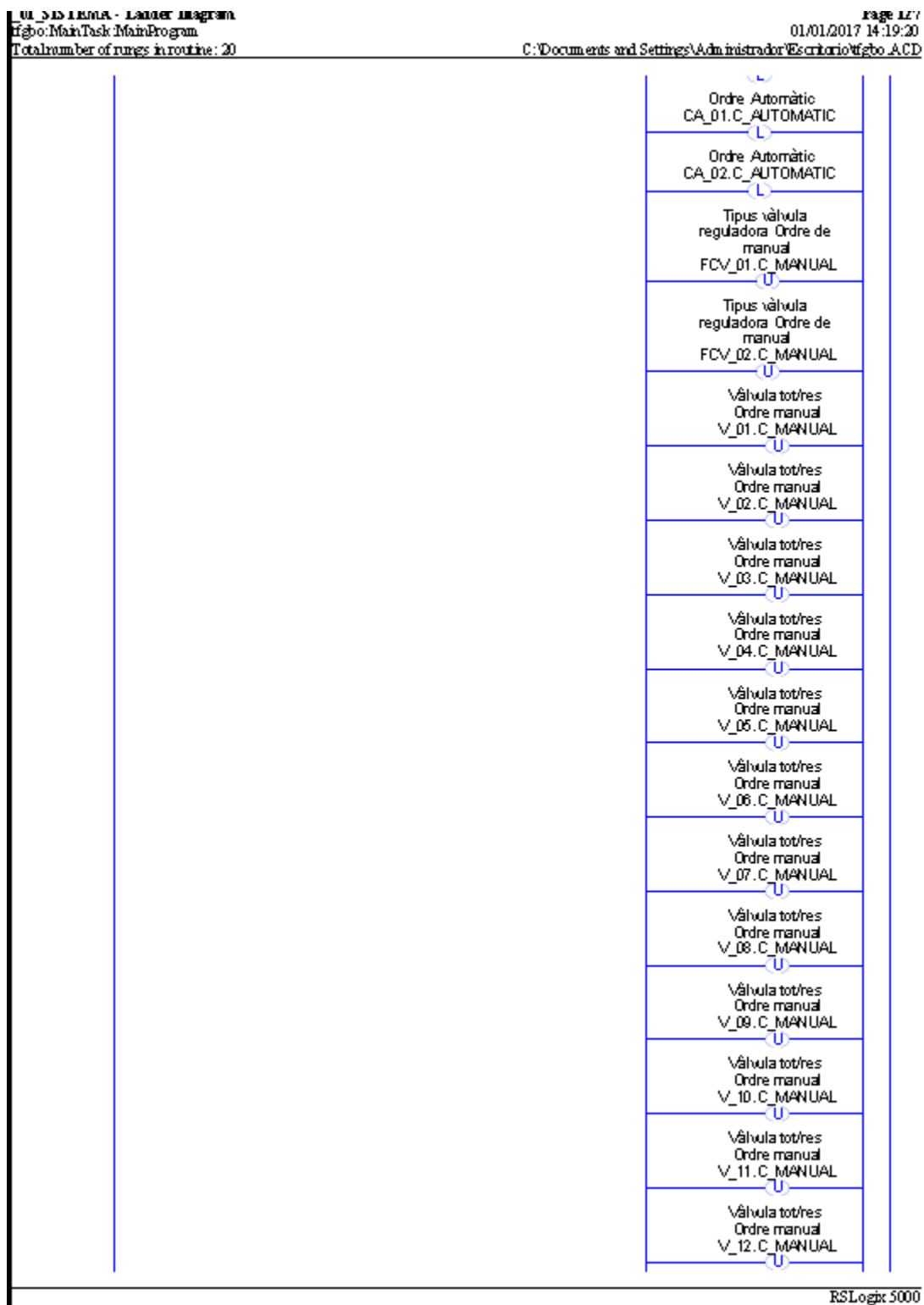
**01 SISTEMA - Ladder Diagram**  
 fgo:MainTask:MainProgram  
 Total number of rungs in routine: 20

**Page 126**  
 01/01/2017 14:19:20  
 C:\Documents and Settings\Administrador\Escritorio\figbo\_A.CD



RSLogix 5000





**01\_SISTEMA - Ladder Diagram**

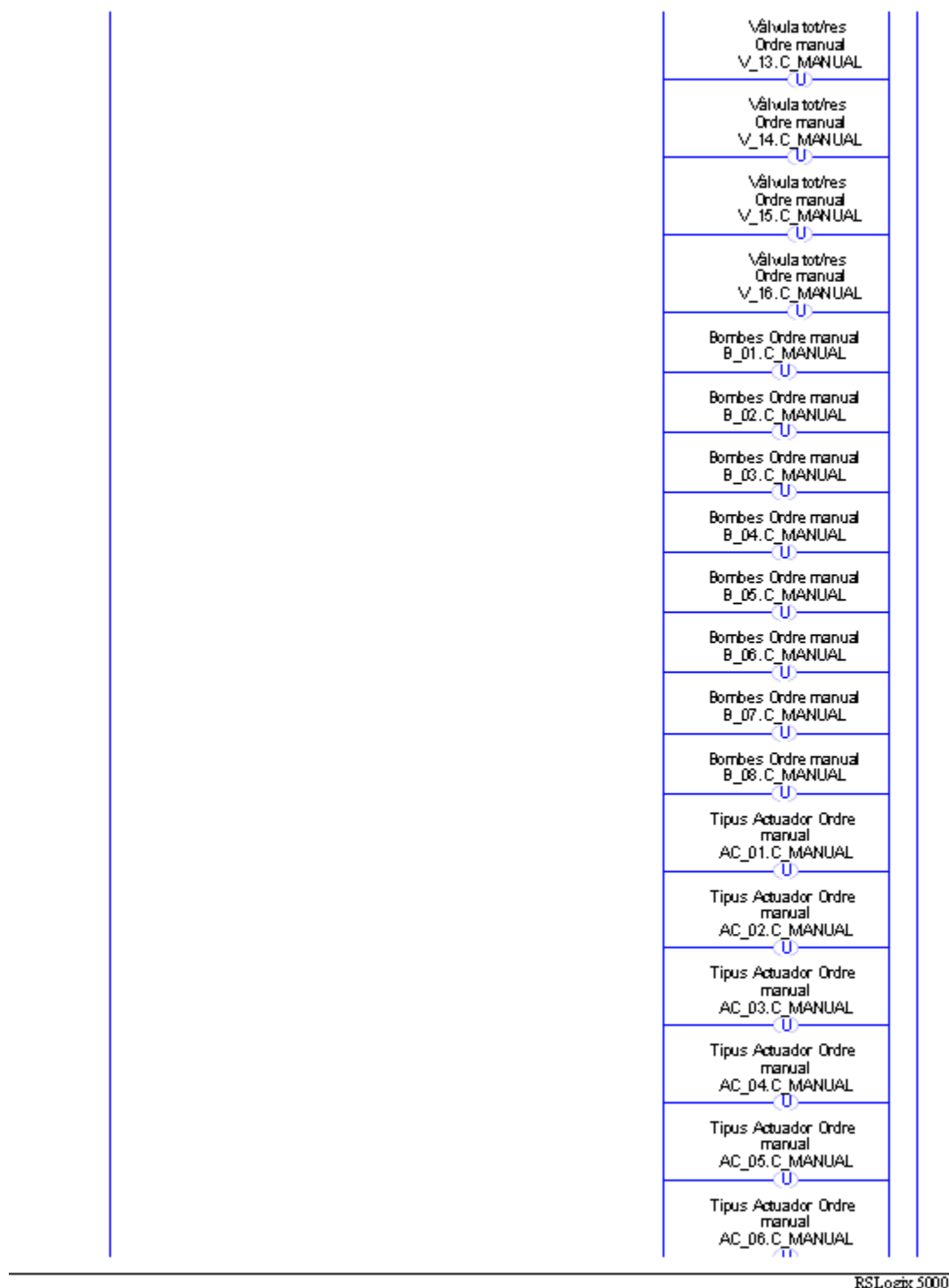
figbo.MainTask.MainProgram

Total number of rungs in routine: 20

Page 128

01/01/2017 14:19:20

C:\Documents and Settings\Administrador\Escritorio\figbo.ACD



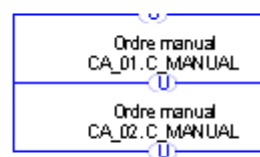
RSLogix 5000

01\_SISTEMA - Ladder Diagram  
Hobo: MainTask.MainProgram  
Total number of rungs in routine: 20

Page 129

01/01/2017 14:19:20

C:\Documents and Settings\Administrador\Escritori\Hobo\_ACD



UI SISTEMA - Ladder Diagram

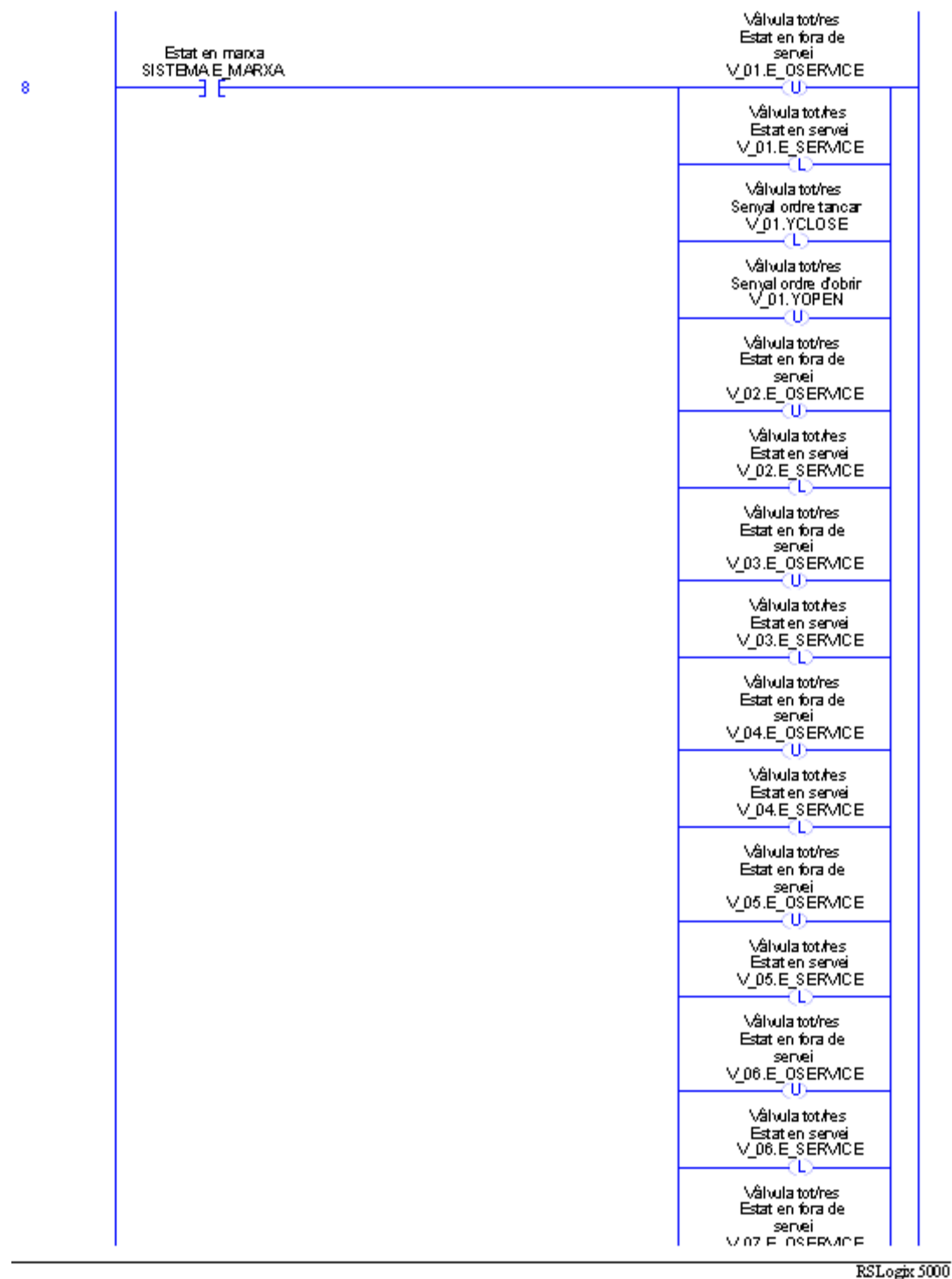
figbo:MainTask:MainProgram

Total number of rungs in routine: 20

Page 150

01/01/2017 14:19:20

C:\Documents and Settings\Administrador\Escritorio\figbo\_ACD



UI\_5.D1.RMA - Ladder Diagram

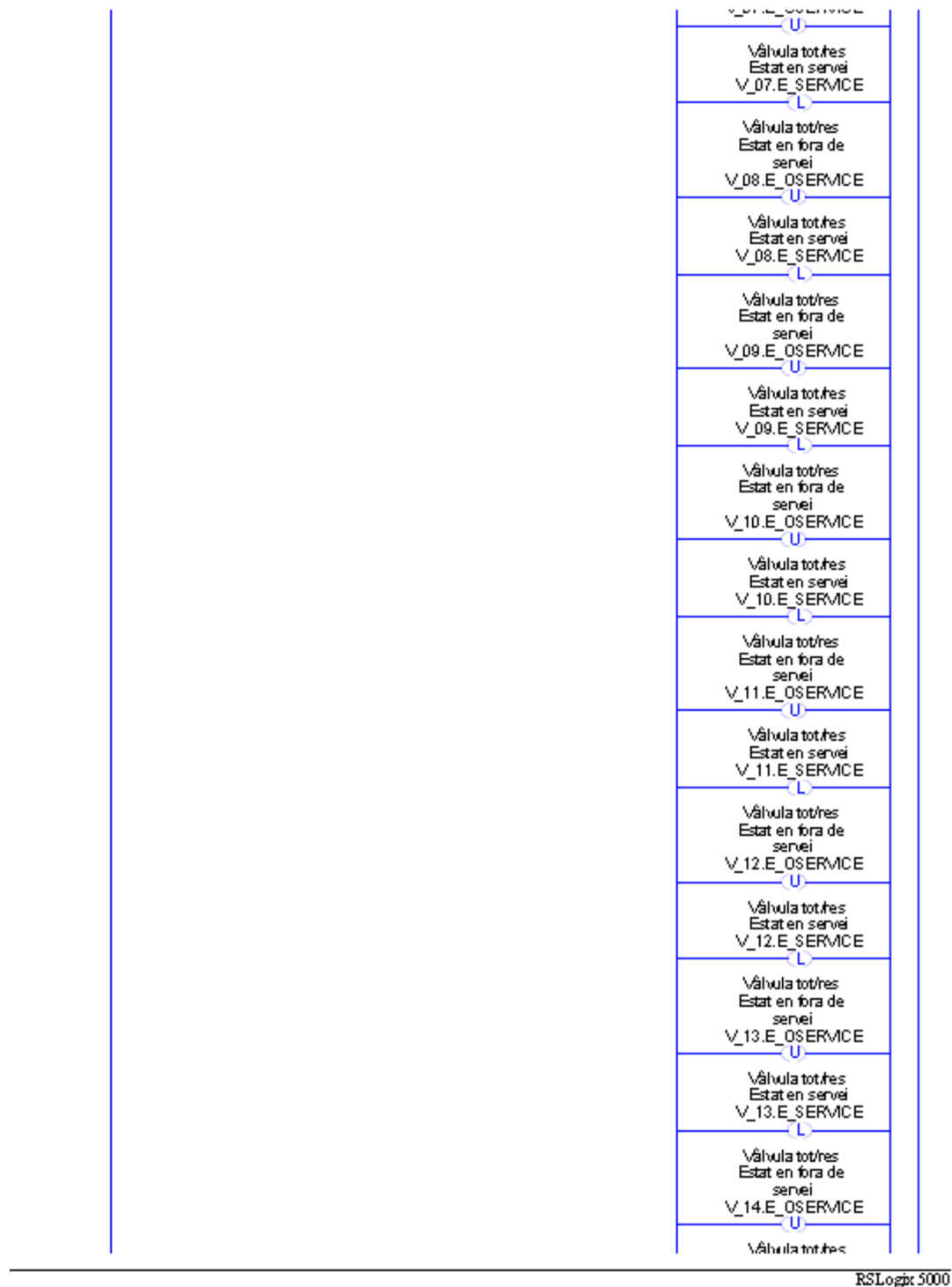
figbo:MainTask:MainProgram

Total number of rungs in routine: 20

Page 151

01/01/2017 14:19:20

C:\Documents and Settings\Administrador\Escritori\figbo\_ACD



RSLogix 5000

## U1\_515 LEMA - Ladder diagram

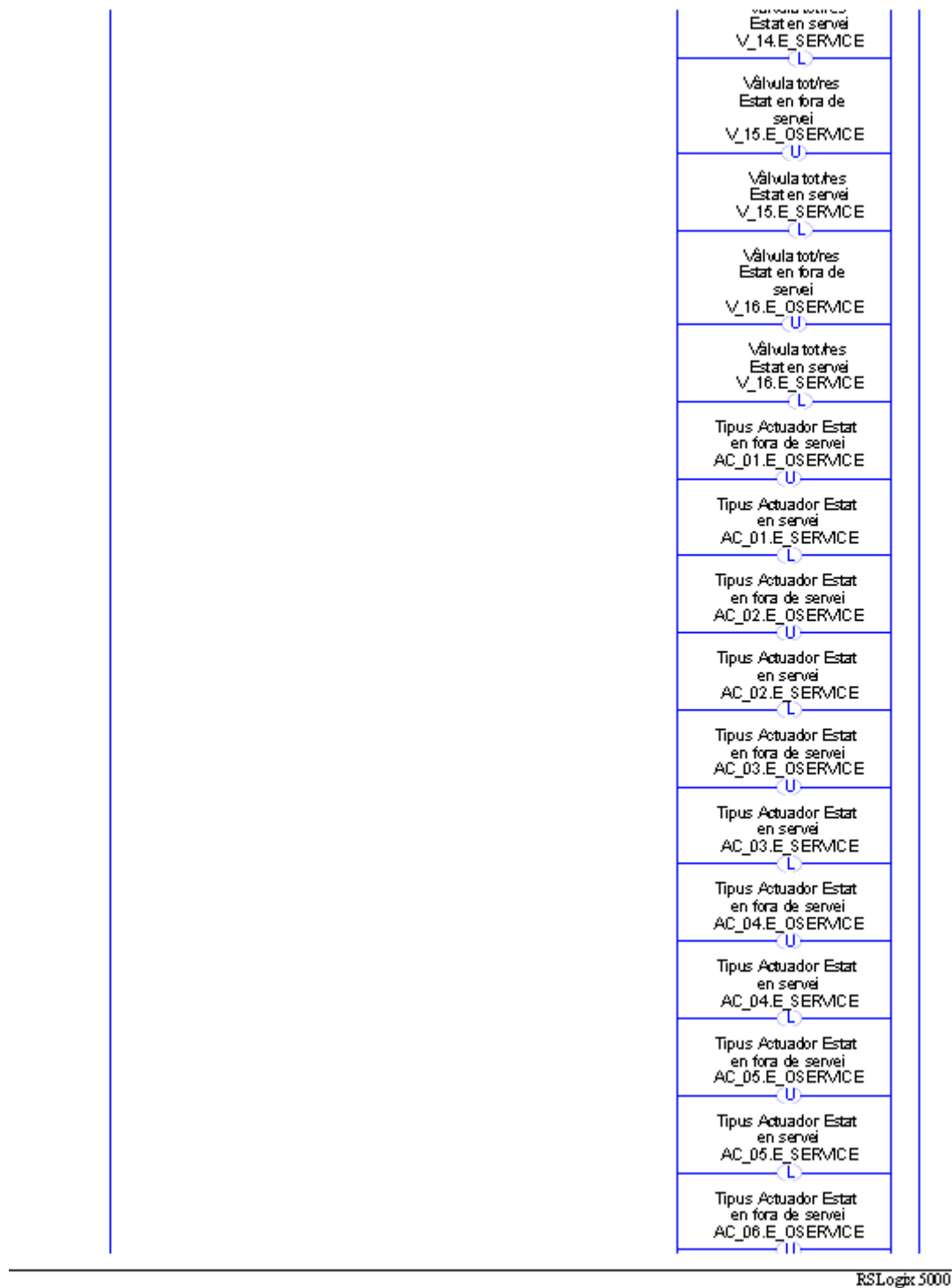
figbo:MainTask:MainProgram

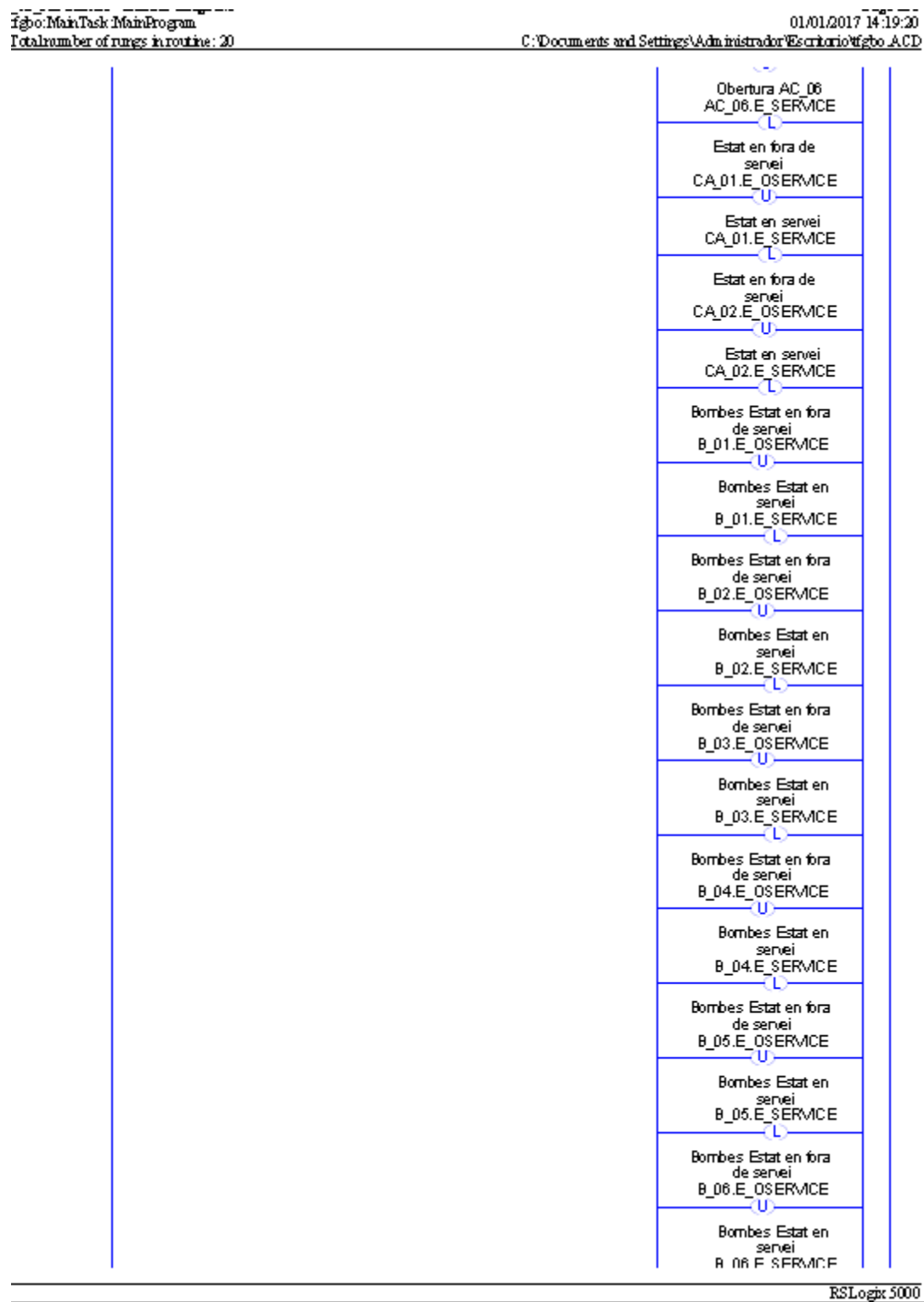
Total number of rungs in routine: 20

Page 157

01/01/2017 14:19:20

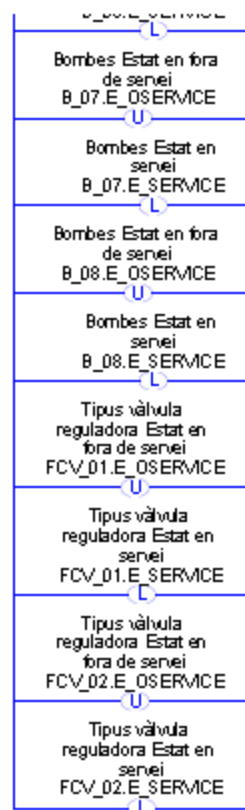
C:\Documents and Settings\Administrador\Escritorio\figbo\_ACD





Figbo.MainTask.MainProgram  
 Total number of rungs in routine: 20

01/01/2017 14:19:20  
 C:\Documents and Settings\Administrador\Escritorio\Figbo.ACD





## 01 SISTEMA - Ladder Diagram

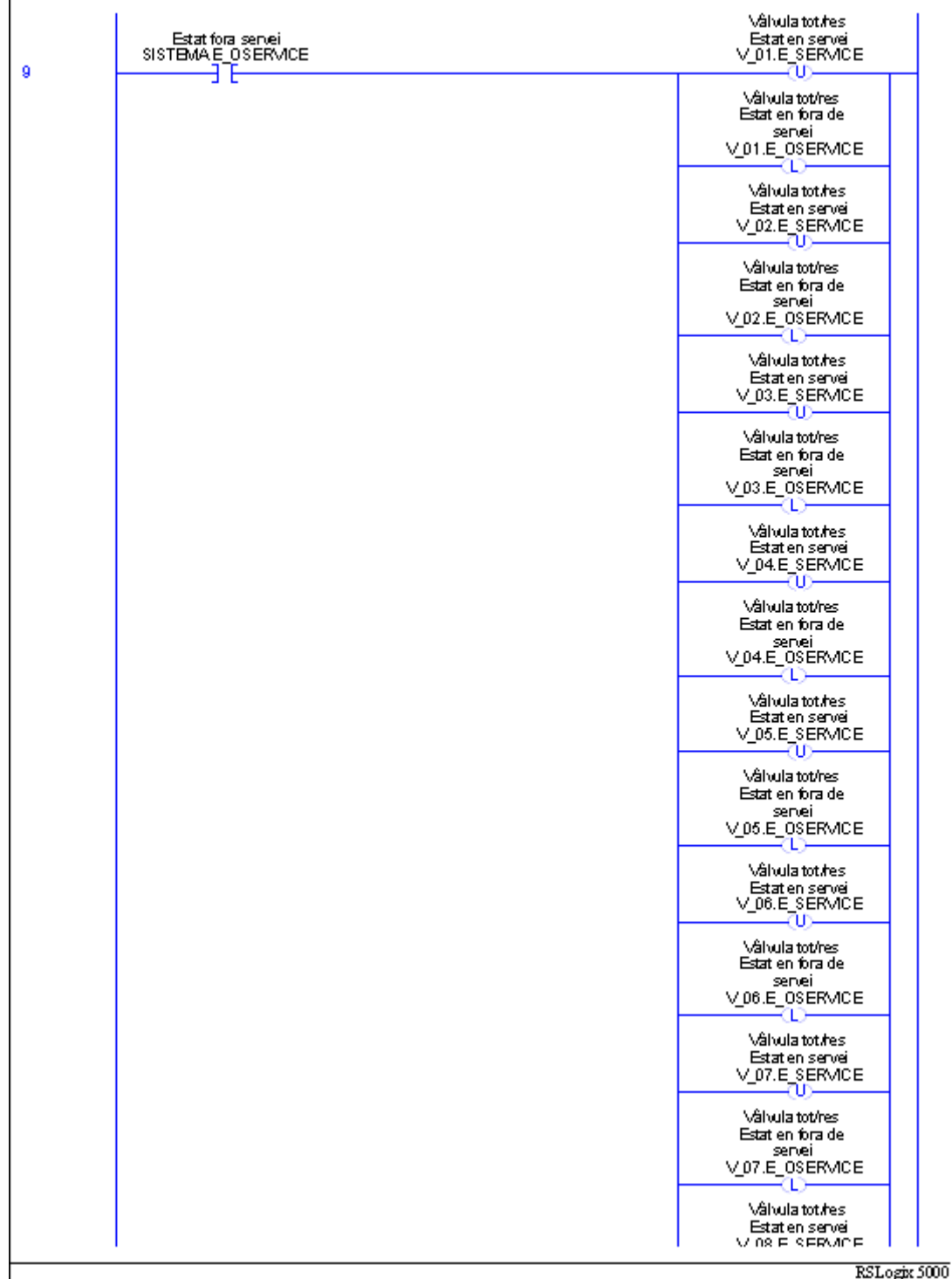
Page 135

Figbo.MainTask.MainProgram

01/01/2017 14:19:20

Total number of rungs in routine: 20

C:\Documents and Settings\Administrador\Escriptorio\Figbo\_A.CD



## 01\_SISTEMA - Ladder Diagram

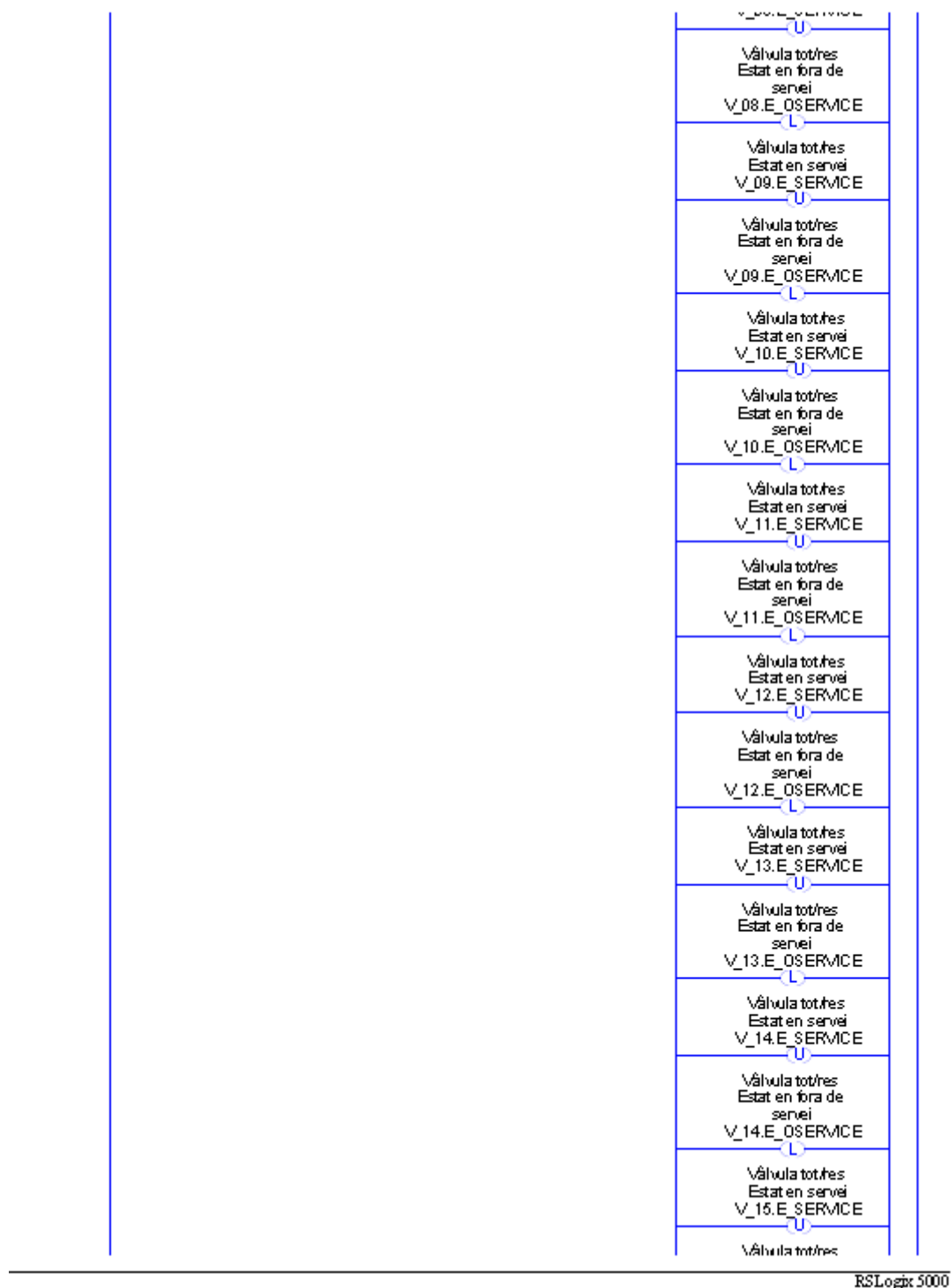
figbo:MainTask:MainProgram

Total number of rungs in routine: 20

Page 136

01/01/2017 14:19:20

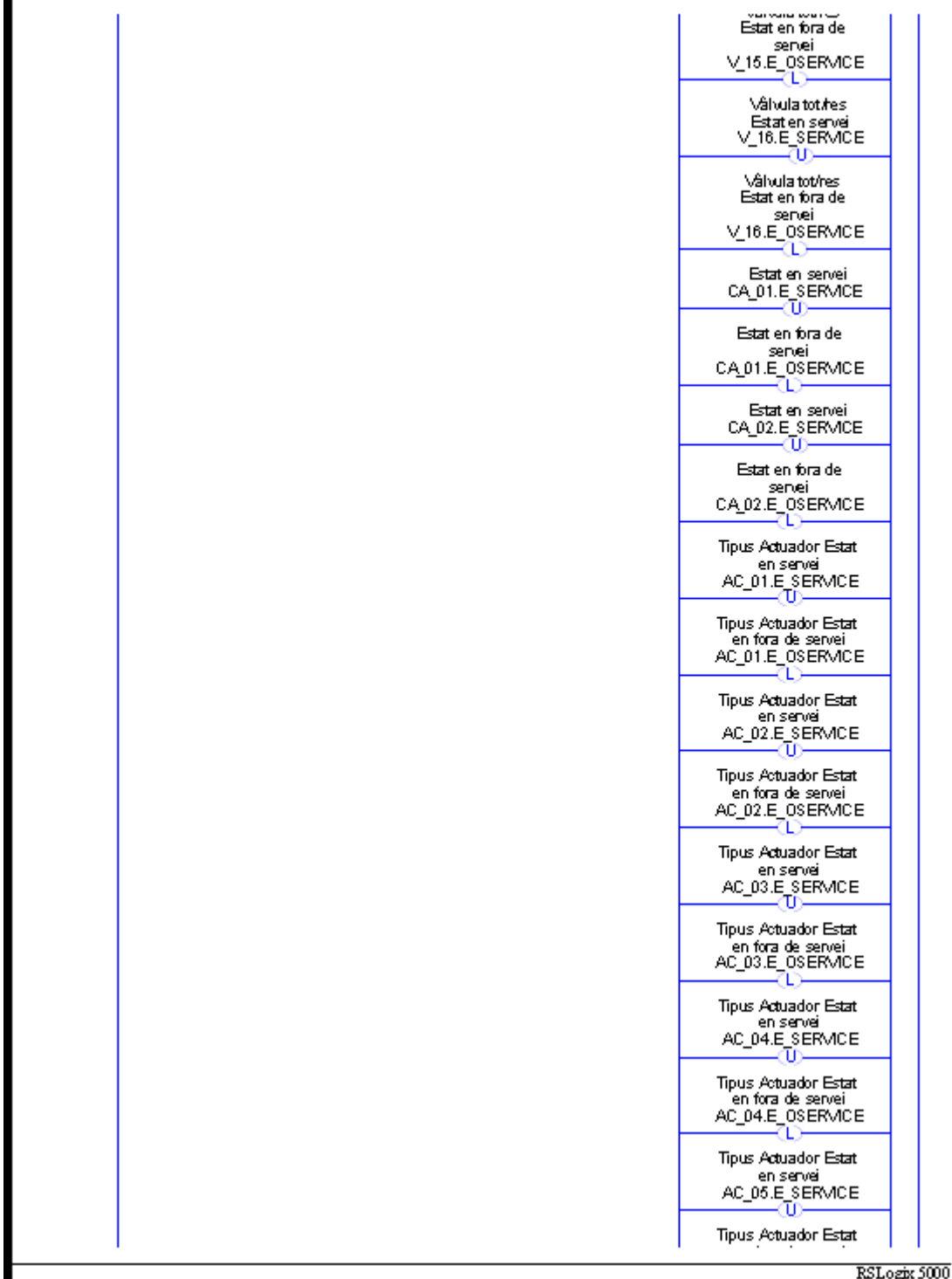
C:\Documents and Settings\Administrador\Escritorio\figbo\_ACD



RSLogix 5000

01\_SISTEMA - Ladder Diagram  
 Figbo:MainTask:MainProgram  
 Total number of rungs in routine: 20

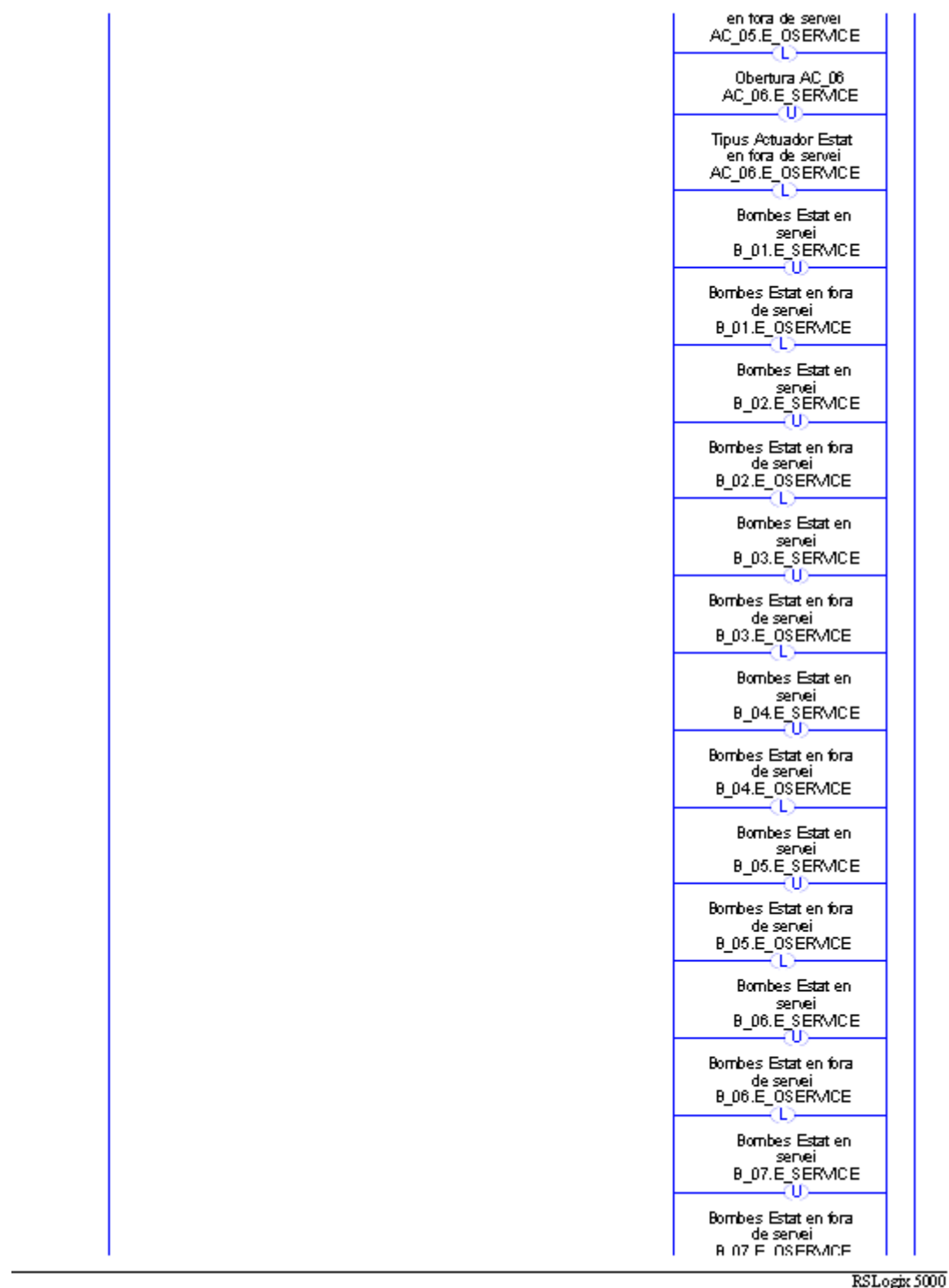
Page 137  
 01/01/2017 14:19:20  
 C:\Documents and Settings\Administrador\Escritorio\Figbo ACD



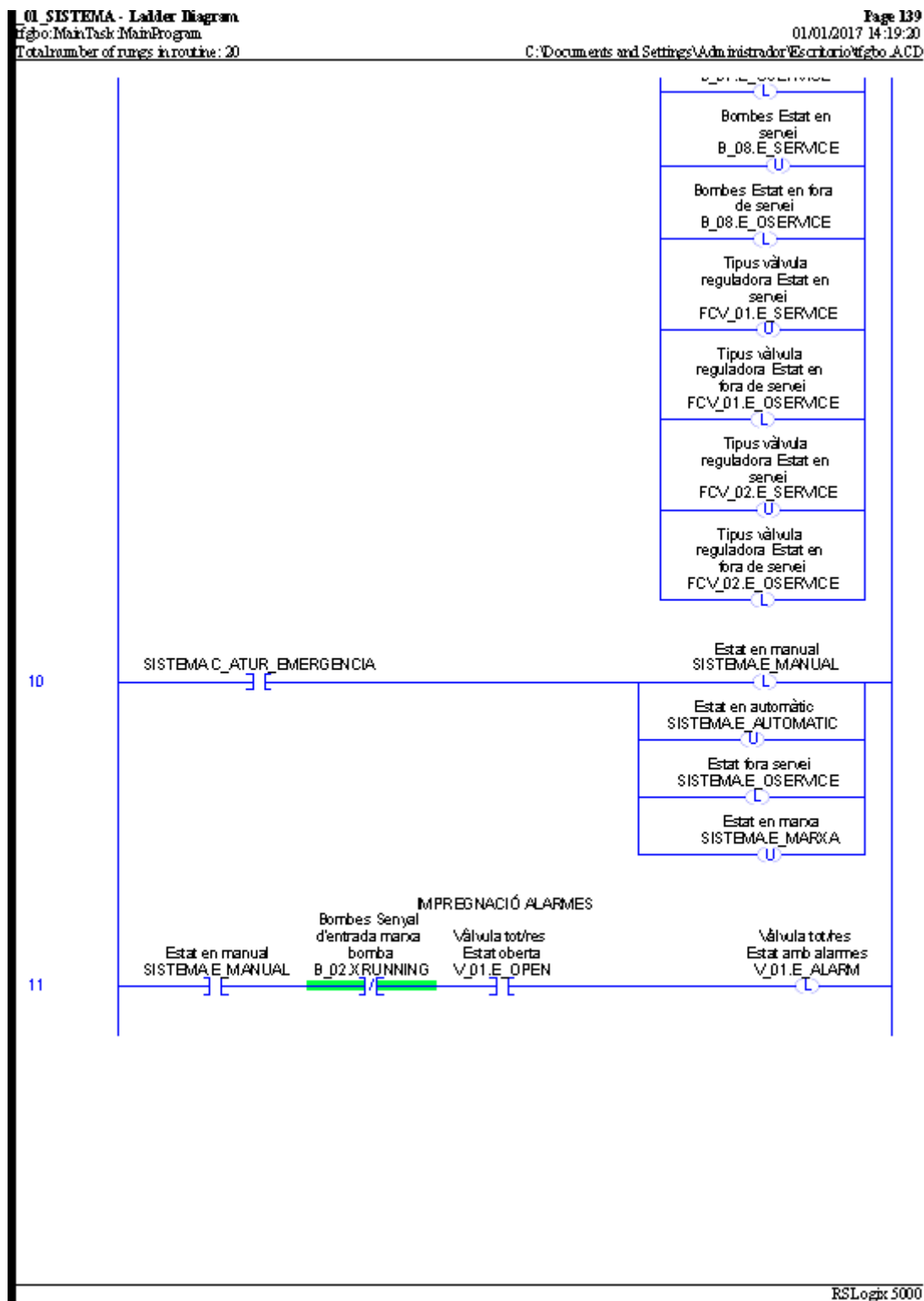
RSLogix 5000

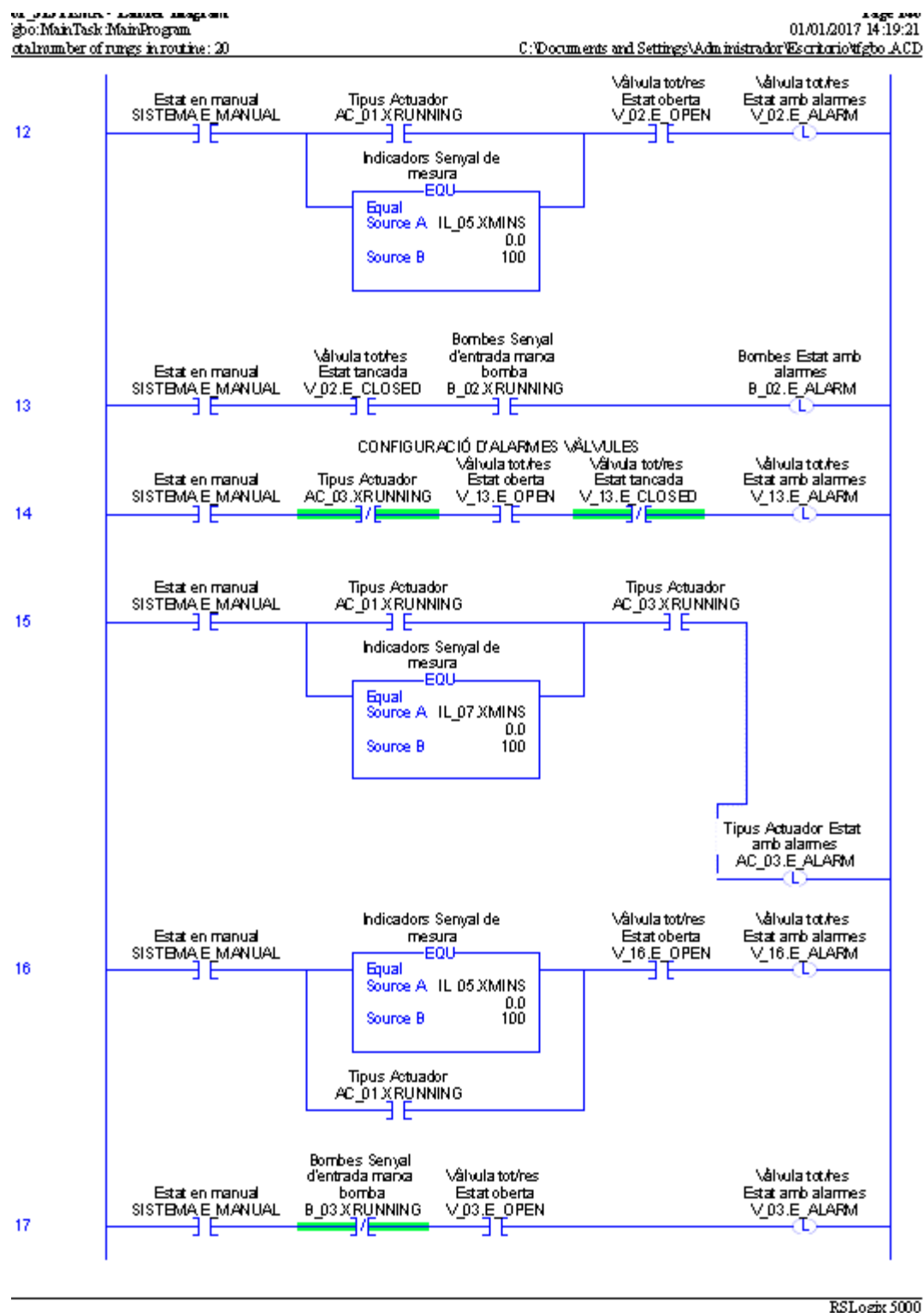
01\_01\_18.MA - Ladder Diagram  
 gbo:MainTask:MainProgram  
 total number of rungs in routine: 20

Page 156  
 01/01/2017 14:19:20  
 C:\Documents and Settings\Administrador\Escritorio\figbo\_ACD



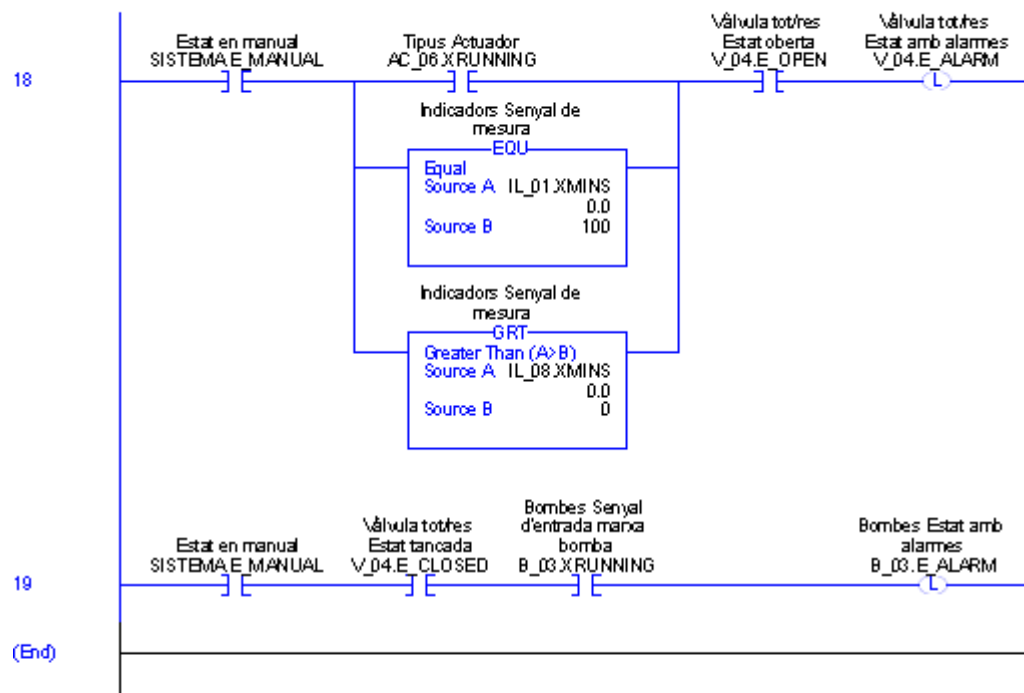
RSLogix 5000





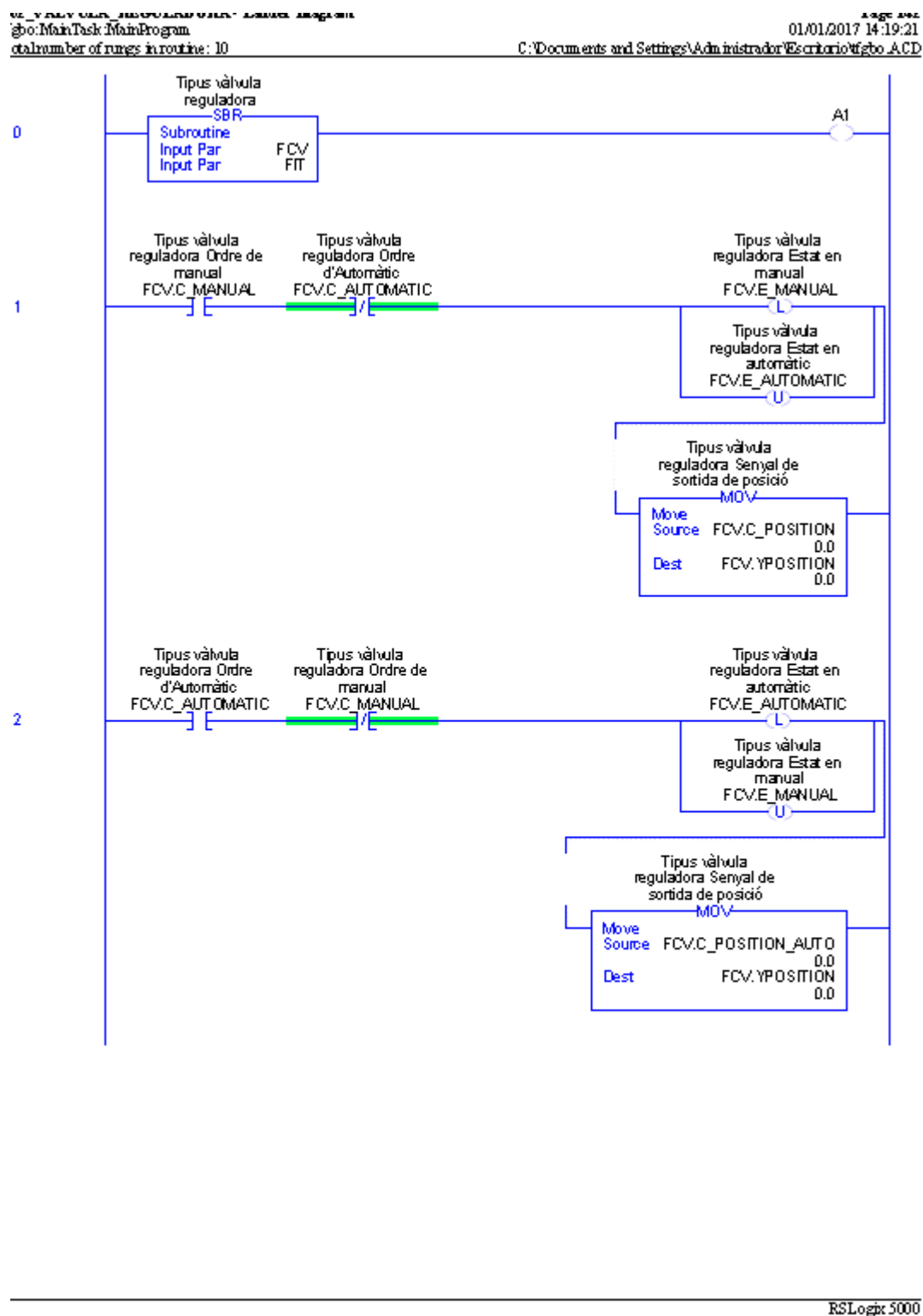
plc:MainTask.MainProgram  
 total number of rungs in routine: 20

01/01/2017 14:19:21  
 C:\Documents and Settings\Administrador\Escritori\lfgbo\_ACD



## **VÀLVULA REGULADORA**





02\_VALVULA\_REGULADORA - Ladder Diagram

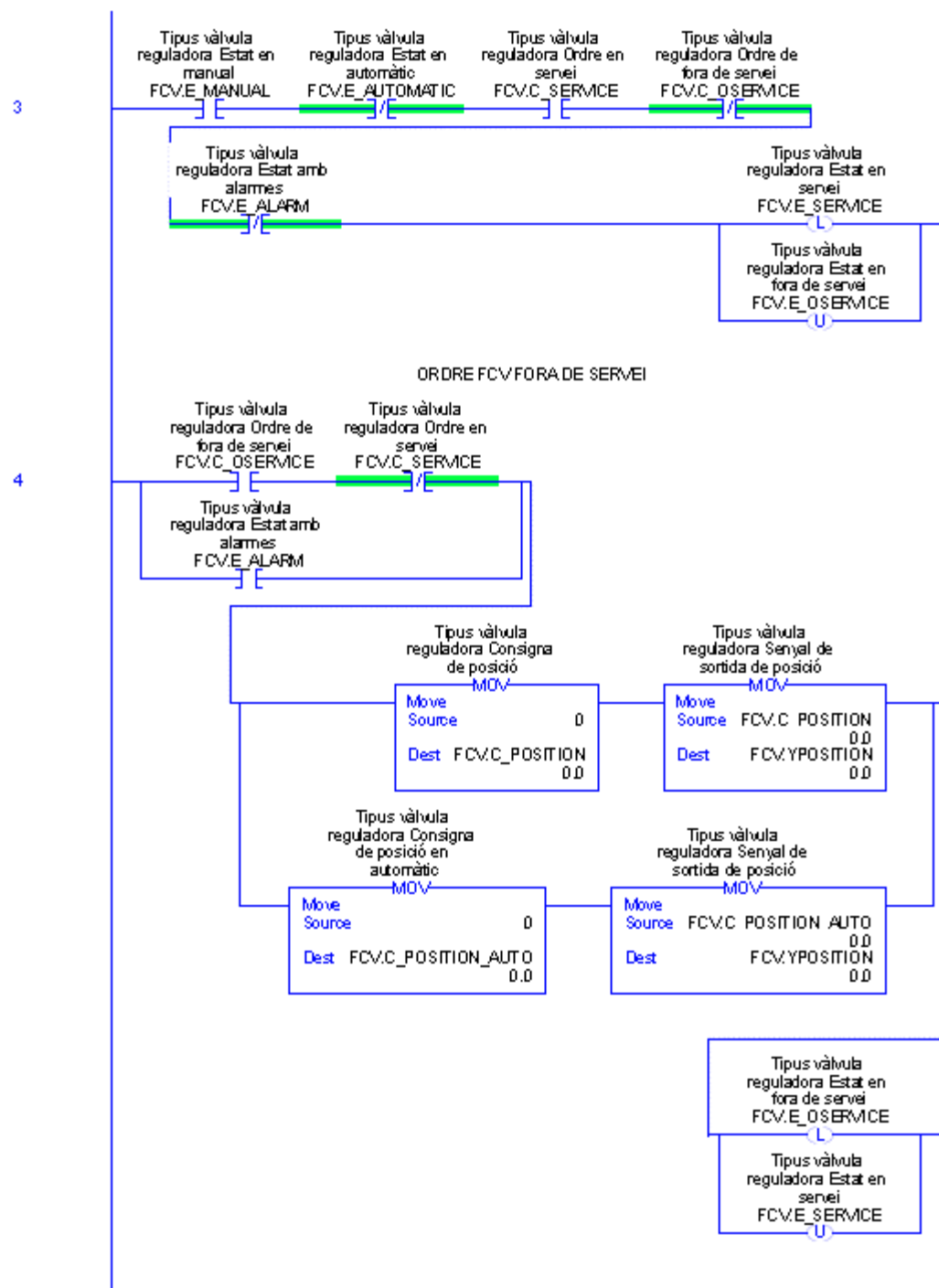
Page 145

figbo:MainTask:MainProgram

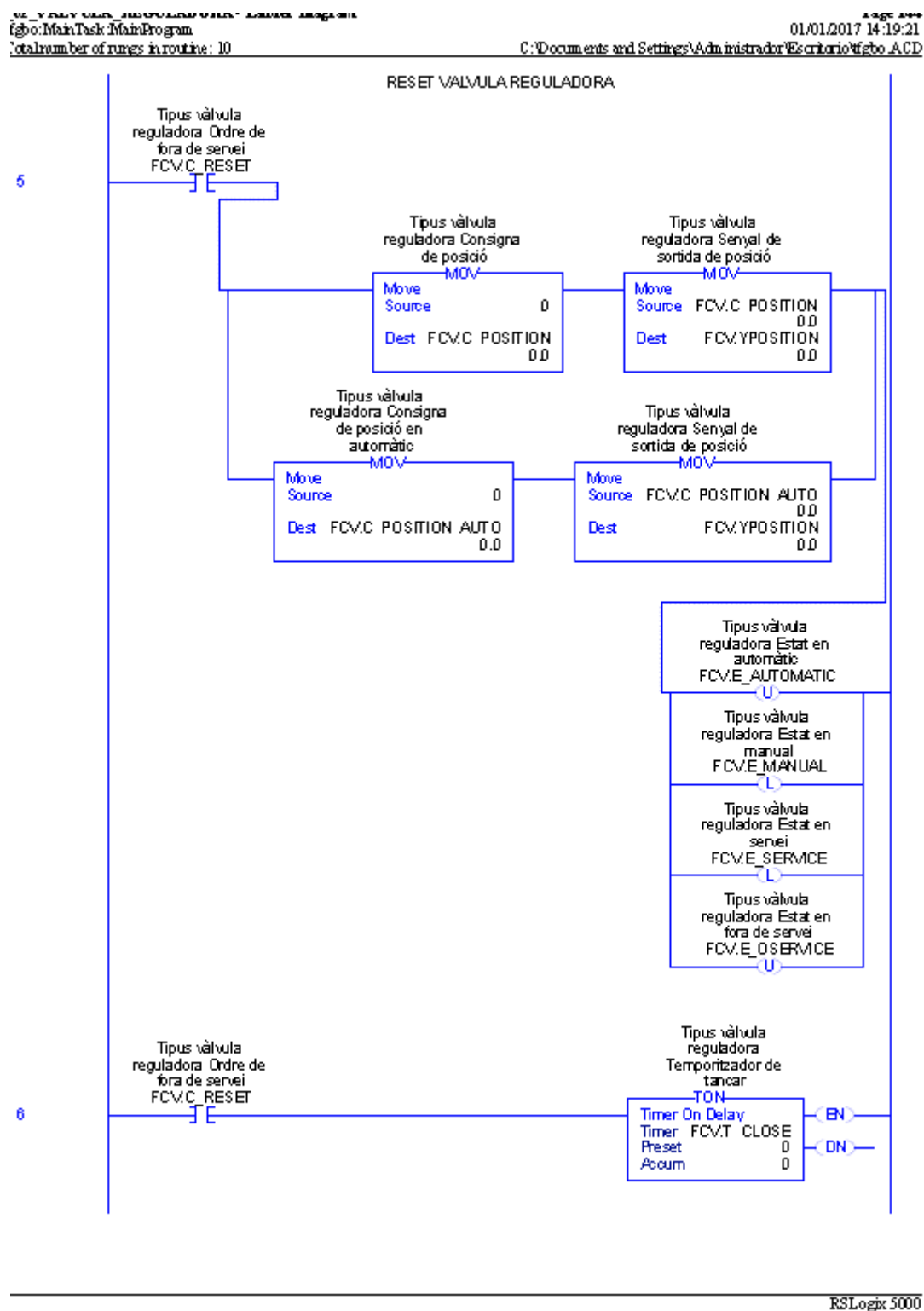
01/01/2017 14:19:21

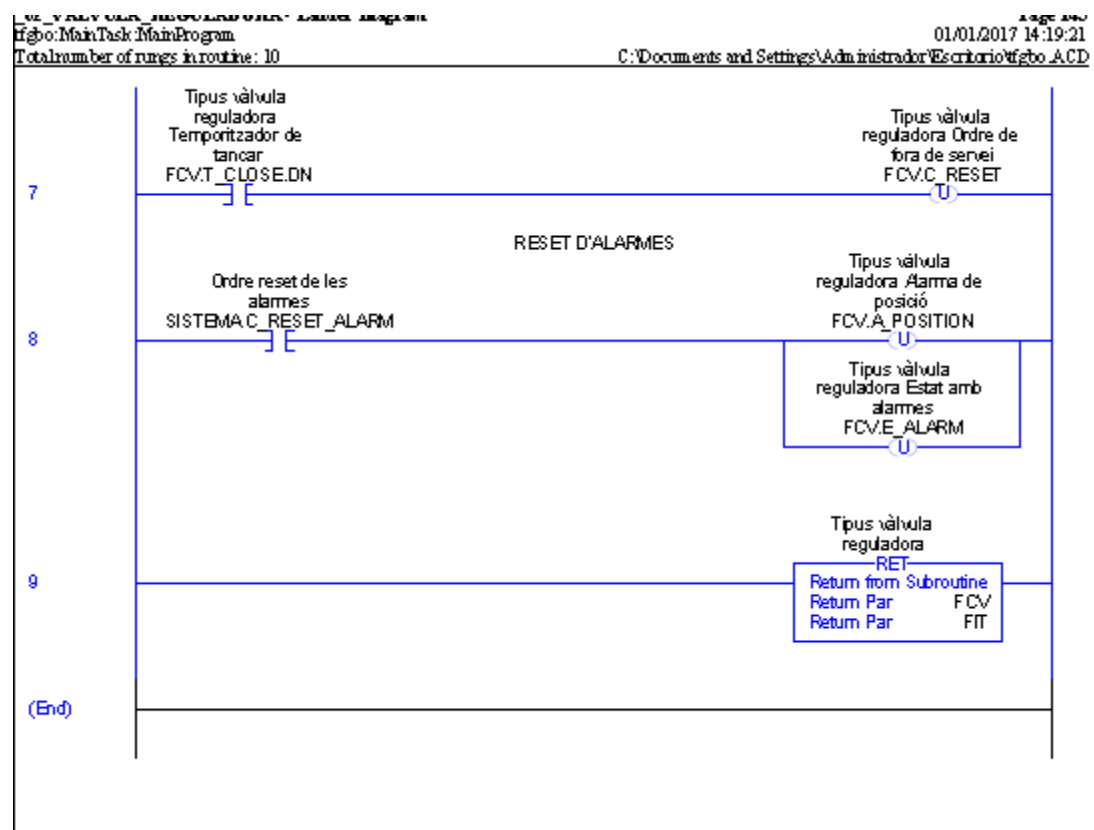
Total number of rungs in routine: 10

C:\Documents and Settings\Administrador\Escritorio\figbo\_ACI

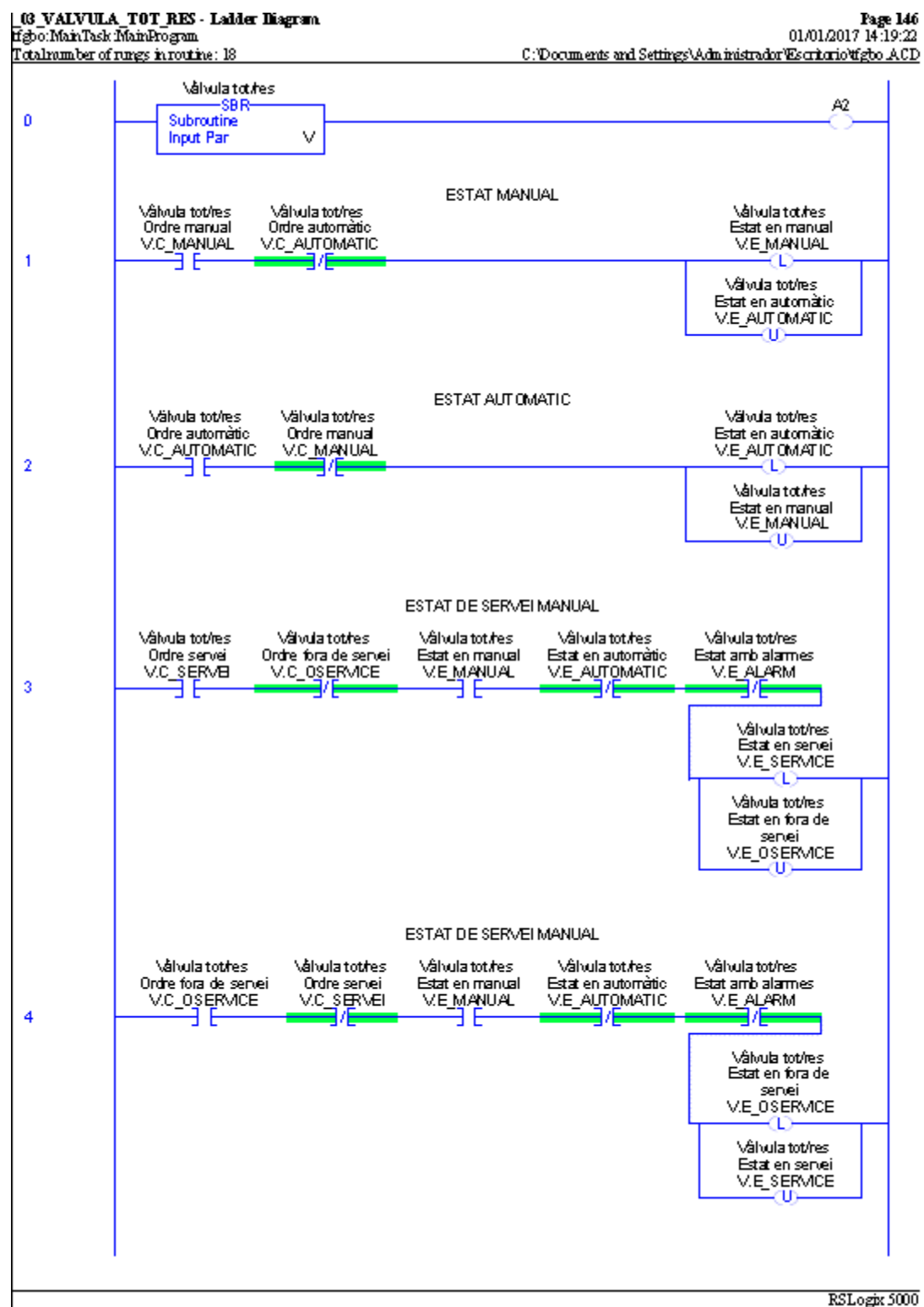


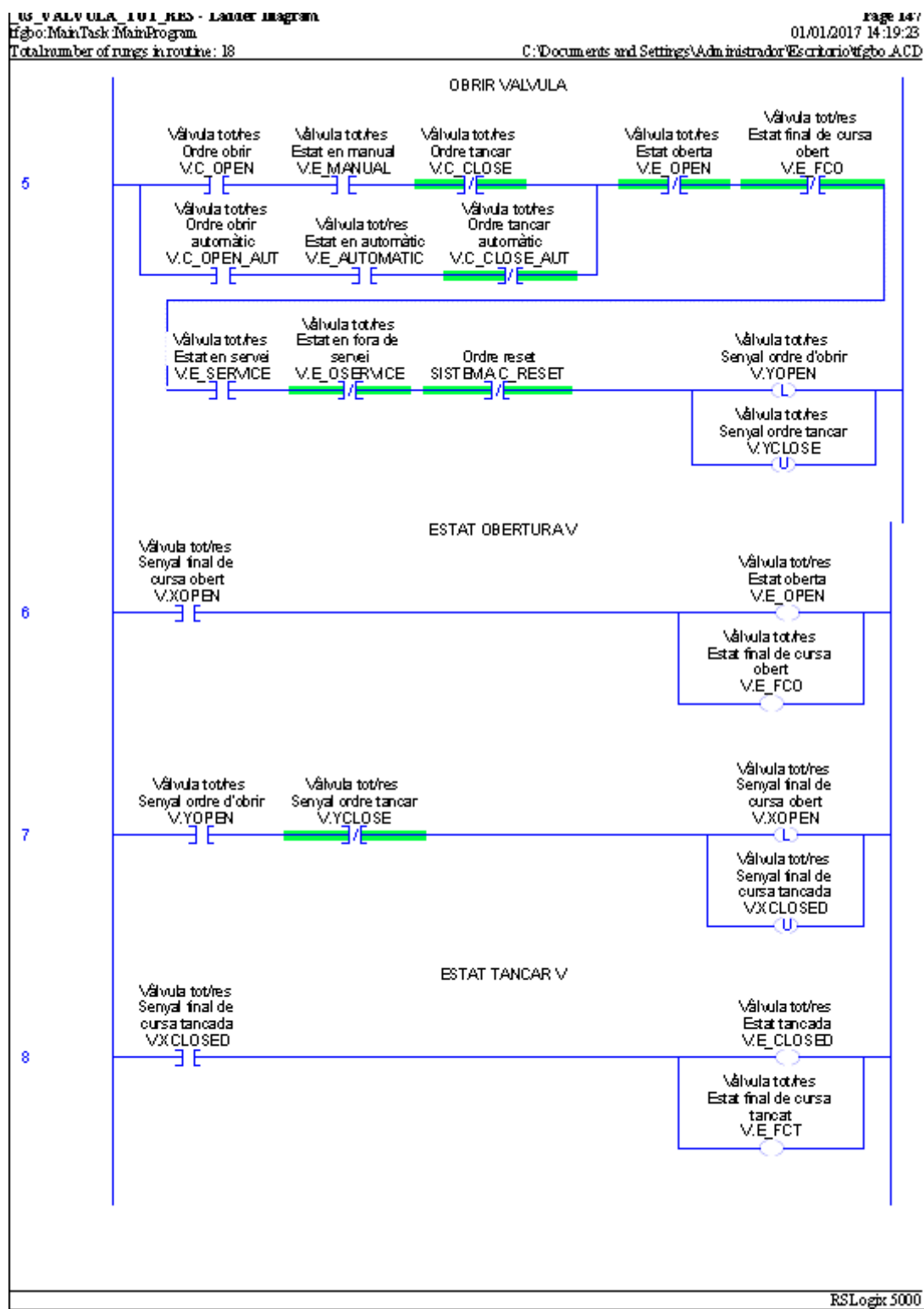
RSLogix 5000





## **VÀLVULA TOT/RES**





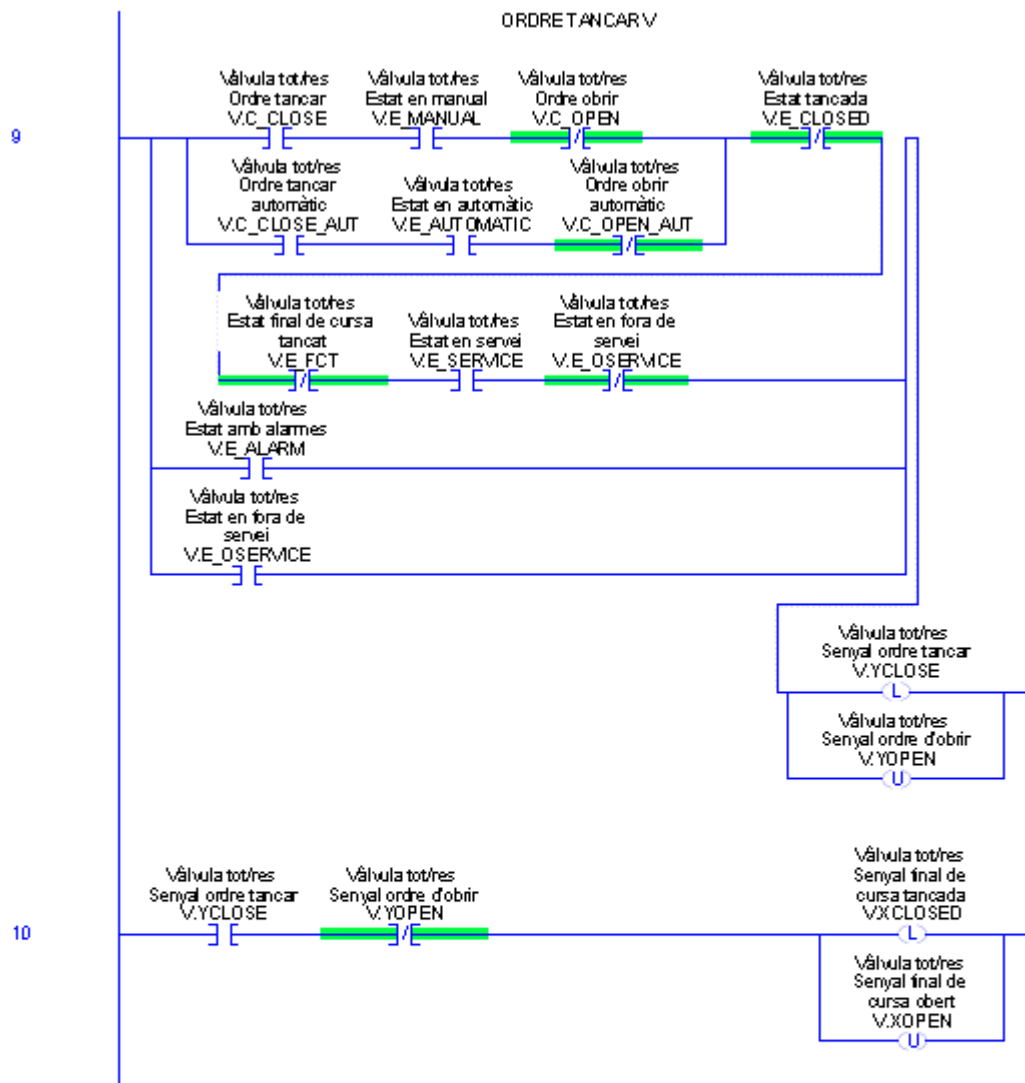




figbo:MainTask.MainProgram  
Total number of rungs in routine: 18

Age: 200  
01/01/2017 14:19:23

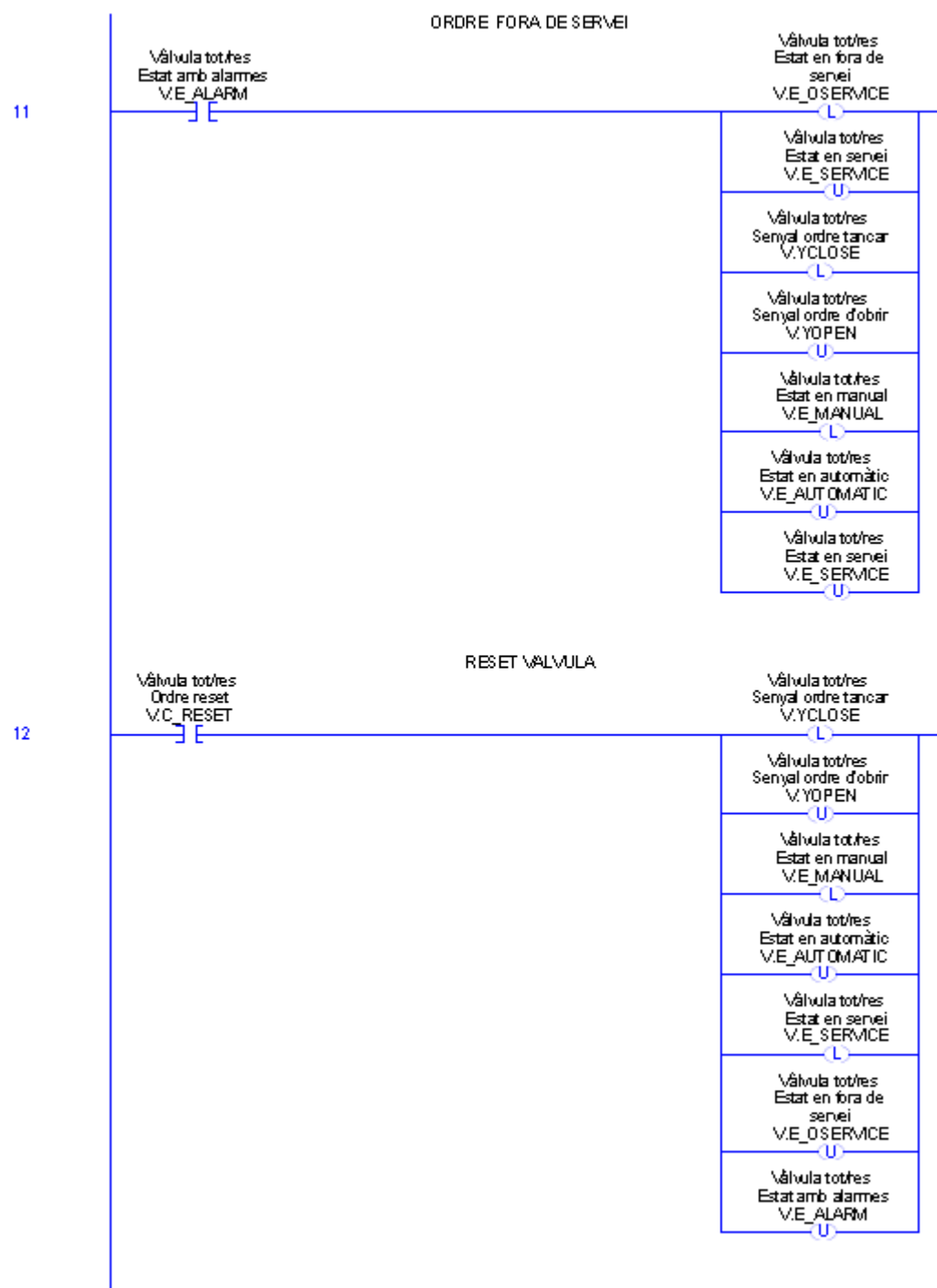
C:\Documents and Settings\Administrador\Escritori\figbo.ACD



RSLogix 5000

\_RS\_VALVULA\_I\_OI\_RIS - Ladder Diagram  
 fgb0:MainTask:MainProgram  
 Total number of rungs in routine: 18

Page 149  
 01/01/2017 14:19:23  
 C:\Documents and Settings\Administrador\Escritorio\fgb0.ACD



RSLogix 5000

## 03 VALVULA\_TOT\_RES - Ladder Diagram

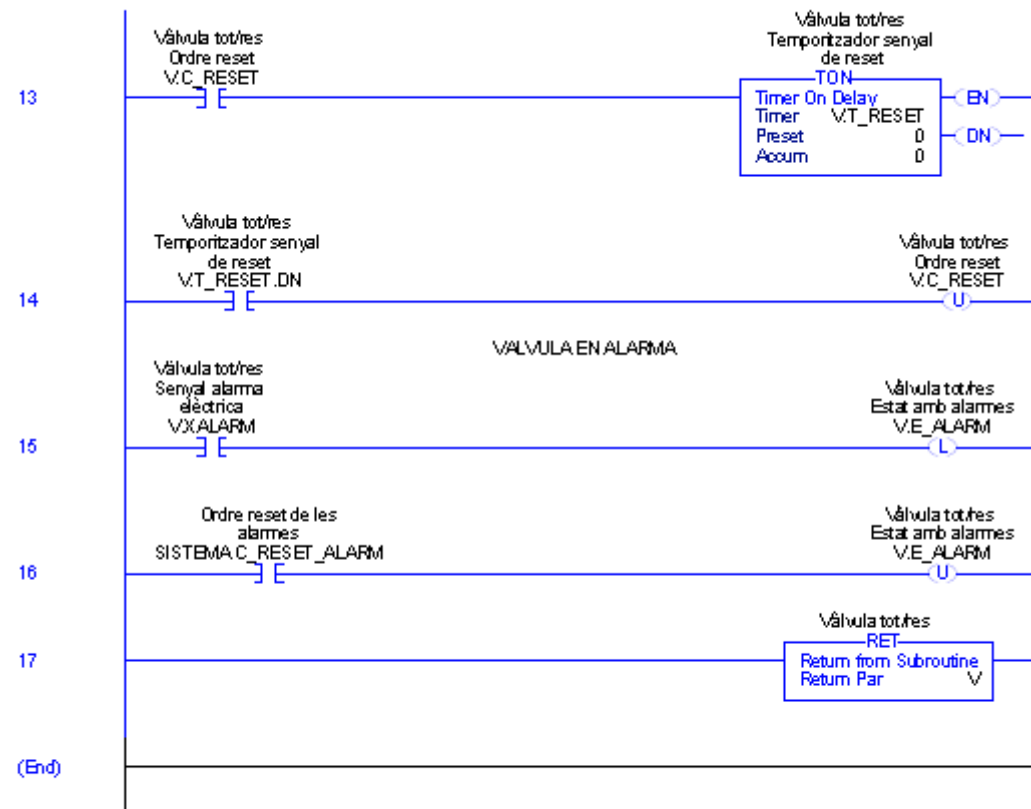
figbo:MainTask:MainProgram

Page 151

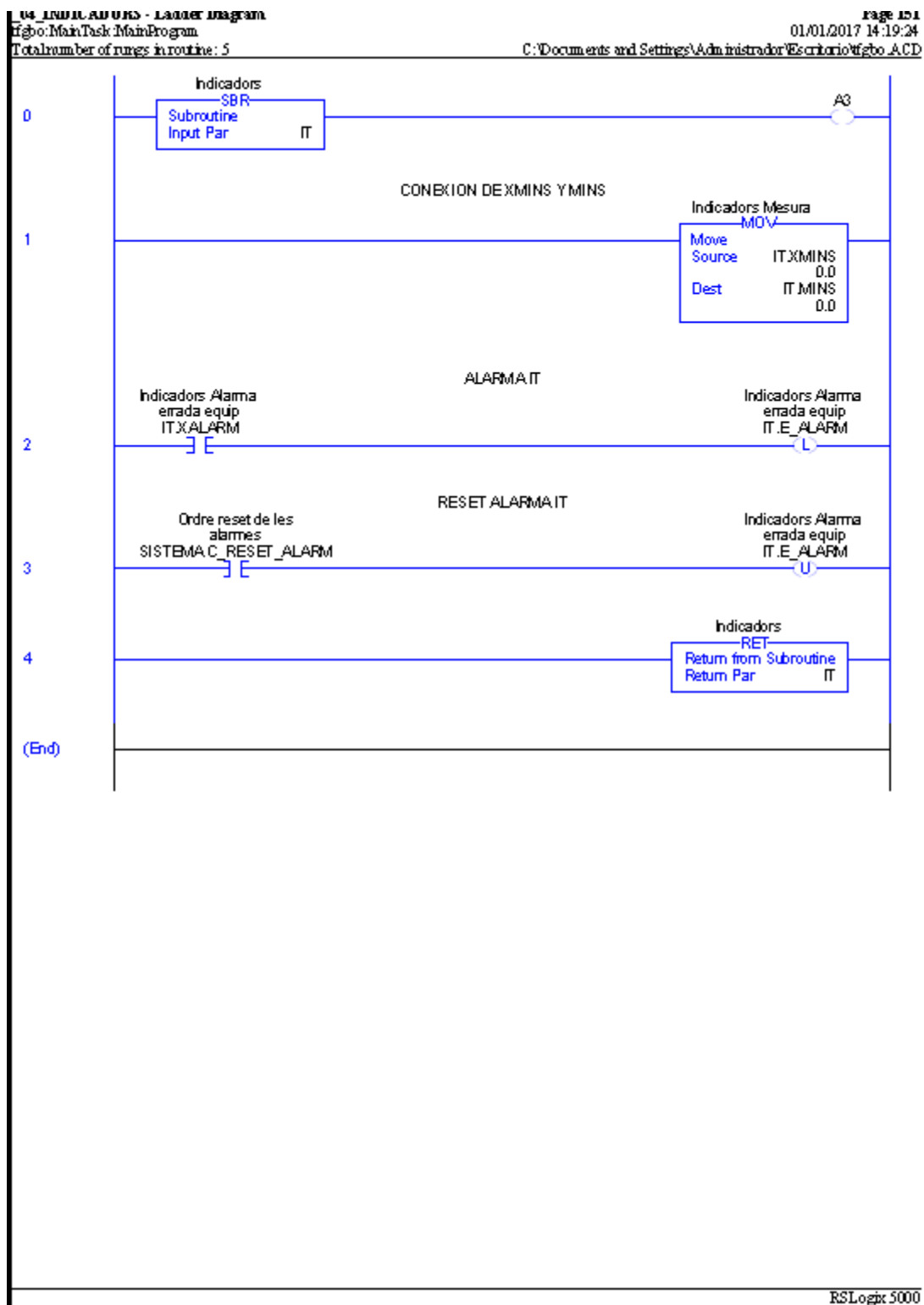
01/01/2017 14:19:22

Total number of rungs in routine: 18

C:\Documents and Settings\Administrador\Escritorio\figbo\_ACI



## INDICADORS



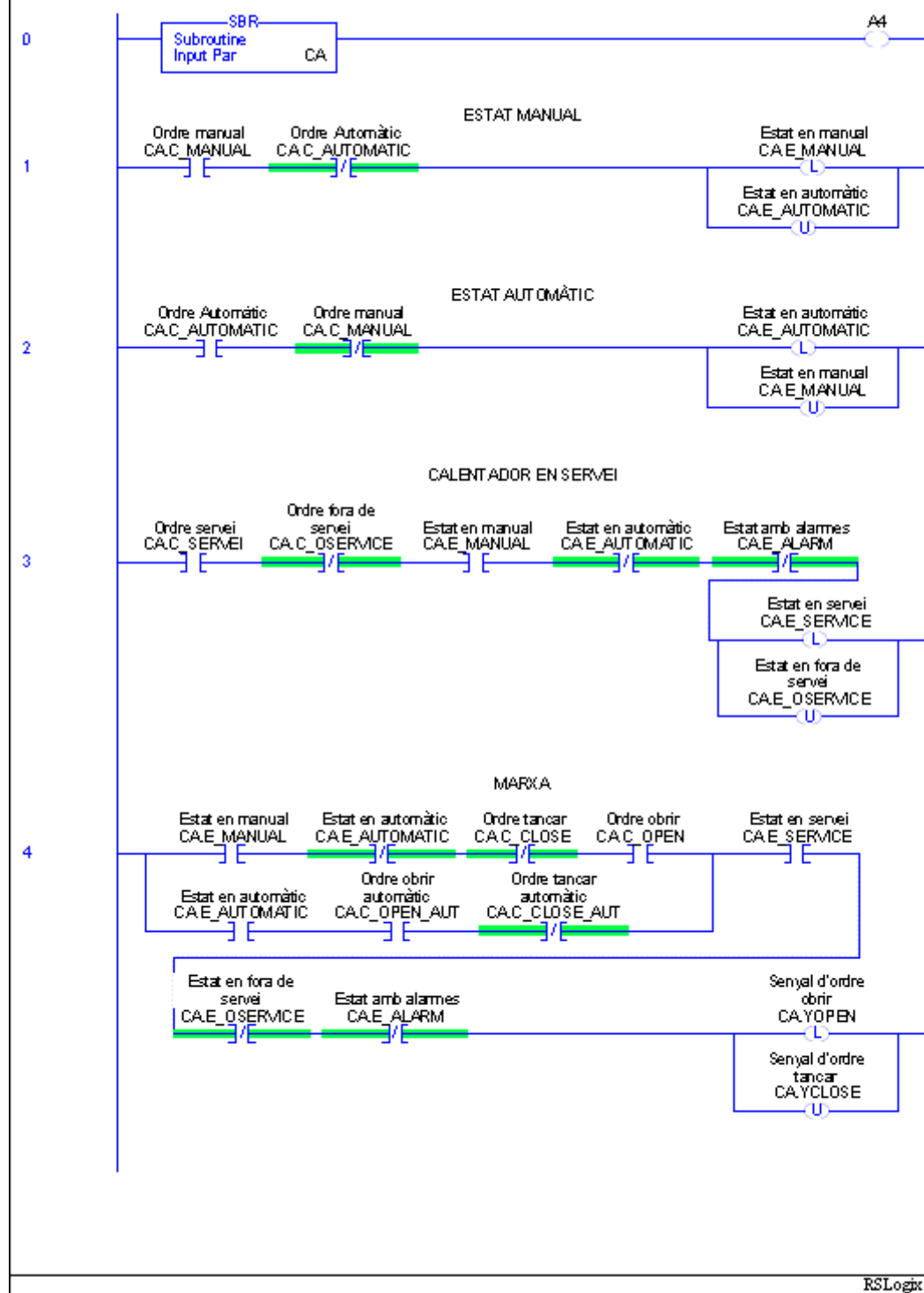
## ESCALFADORS

Figbo: MainTask MainProgram

01/01/2017 14:19:25

Total number of rungs in routine: 14

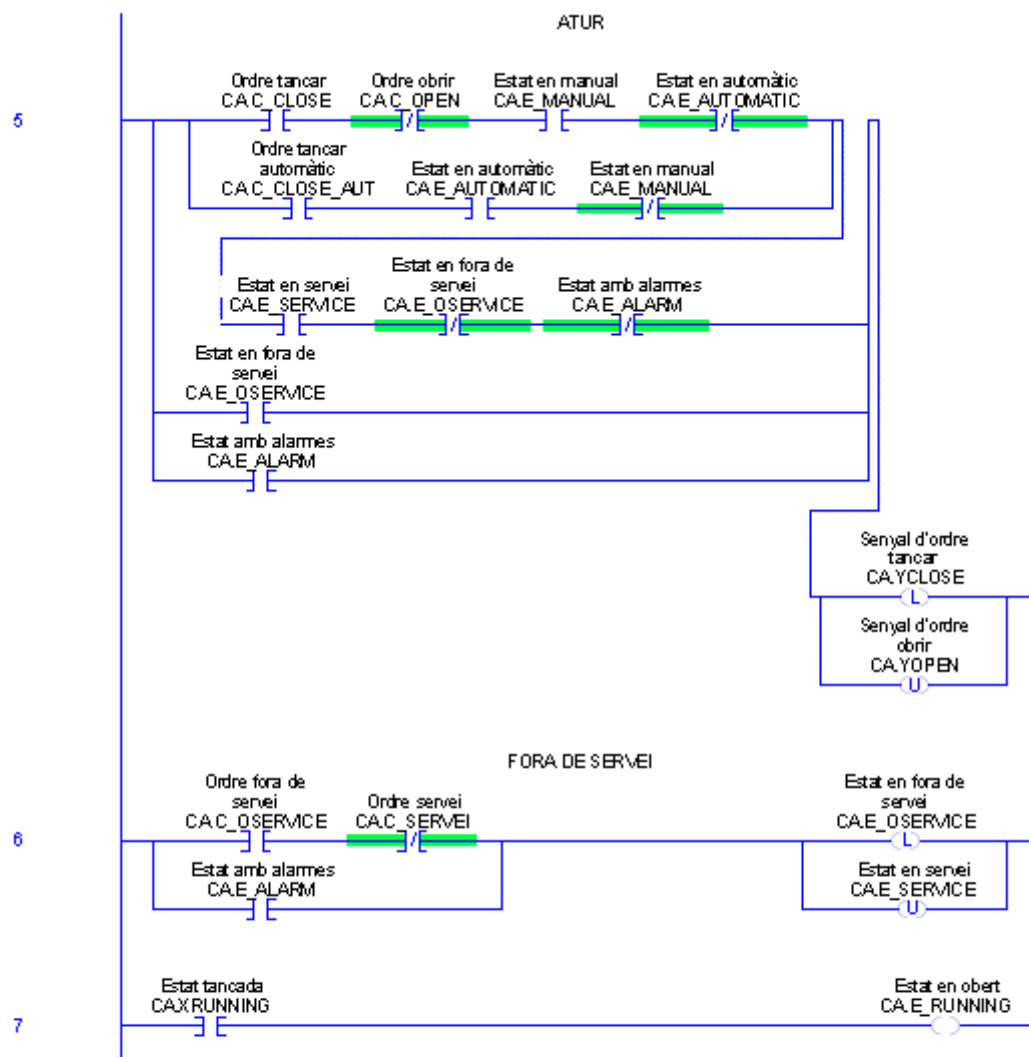
C:\Documents and Settings\Administrador\Escriptorio\Figbo\_A.CD



RSLogix 5000

U\_C\_A - Lander program  
 fgb: MainTask MainProgram  
 Total number of rungs in routine: 14

Page 153  
 01/01/2017 14:19:26  
 C:\Documents and Settings\Administrador\Escritorio\fgbo.ACD



RSLogix 5000

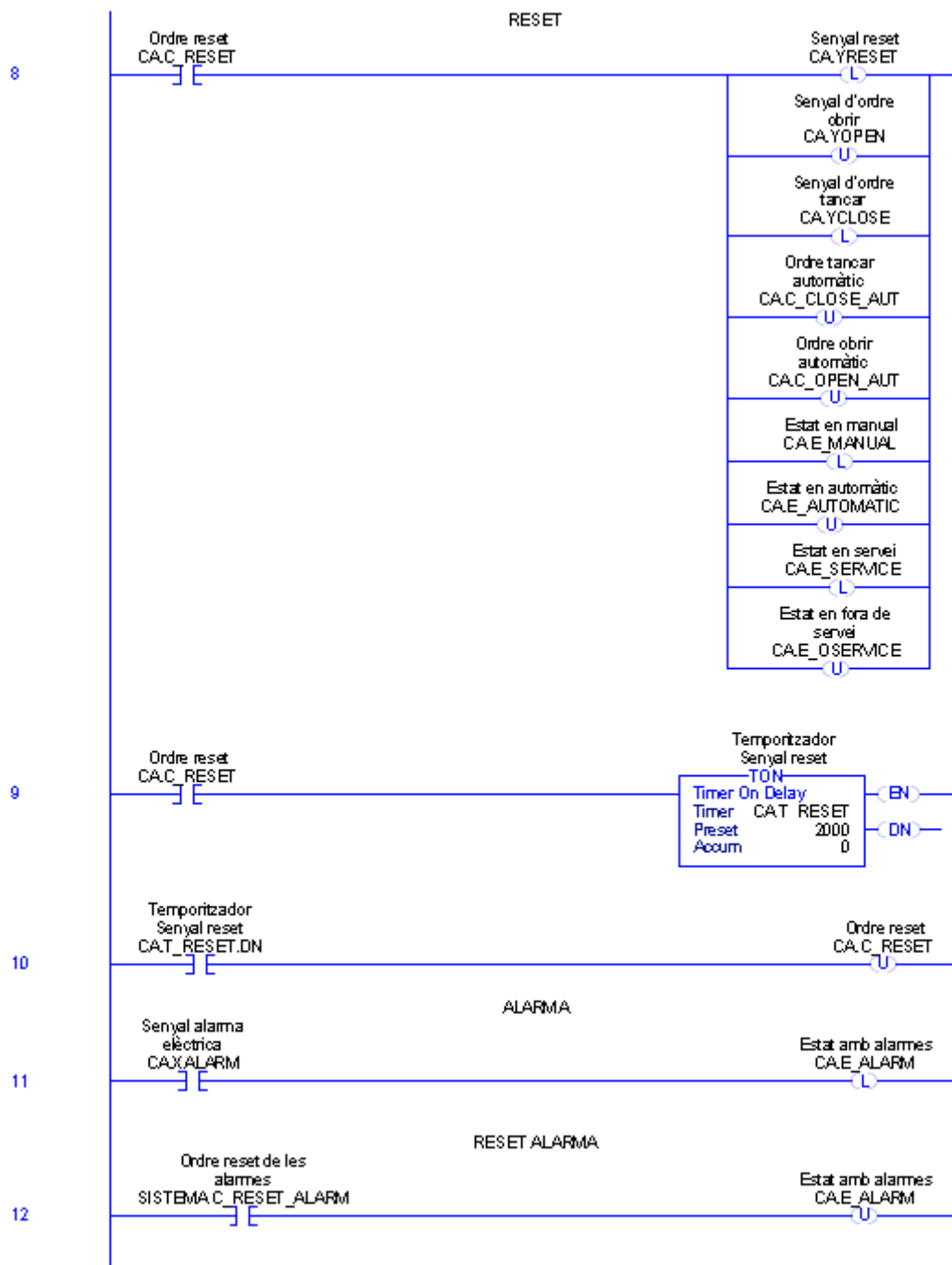


15\_L.A - Ladder Diagram  
 figbo:MainTask:MainProgram  
 Total number of rungs in routine: 14

Page 154

01/01/2017 14:19:26

C:\Documents and Settings\Administrador\Escritori\figbo.LCD



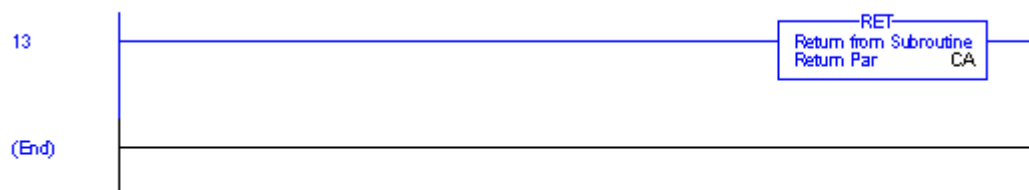
RSLogix 5000

IS\_LA - Ladder Diagram  
figbo.MainTask.MainProgram  
Total number of rungs in routine: 14

Page 12

01/01/2017 14:19:2

C:\Documents and Settings\Administrador\Escritorio\figbo.AC



## **ACTUADORS**

## 06\_AC - Ladder Diagram

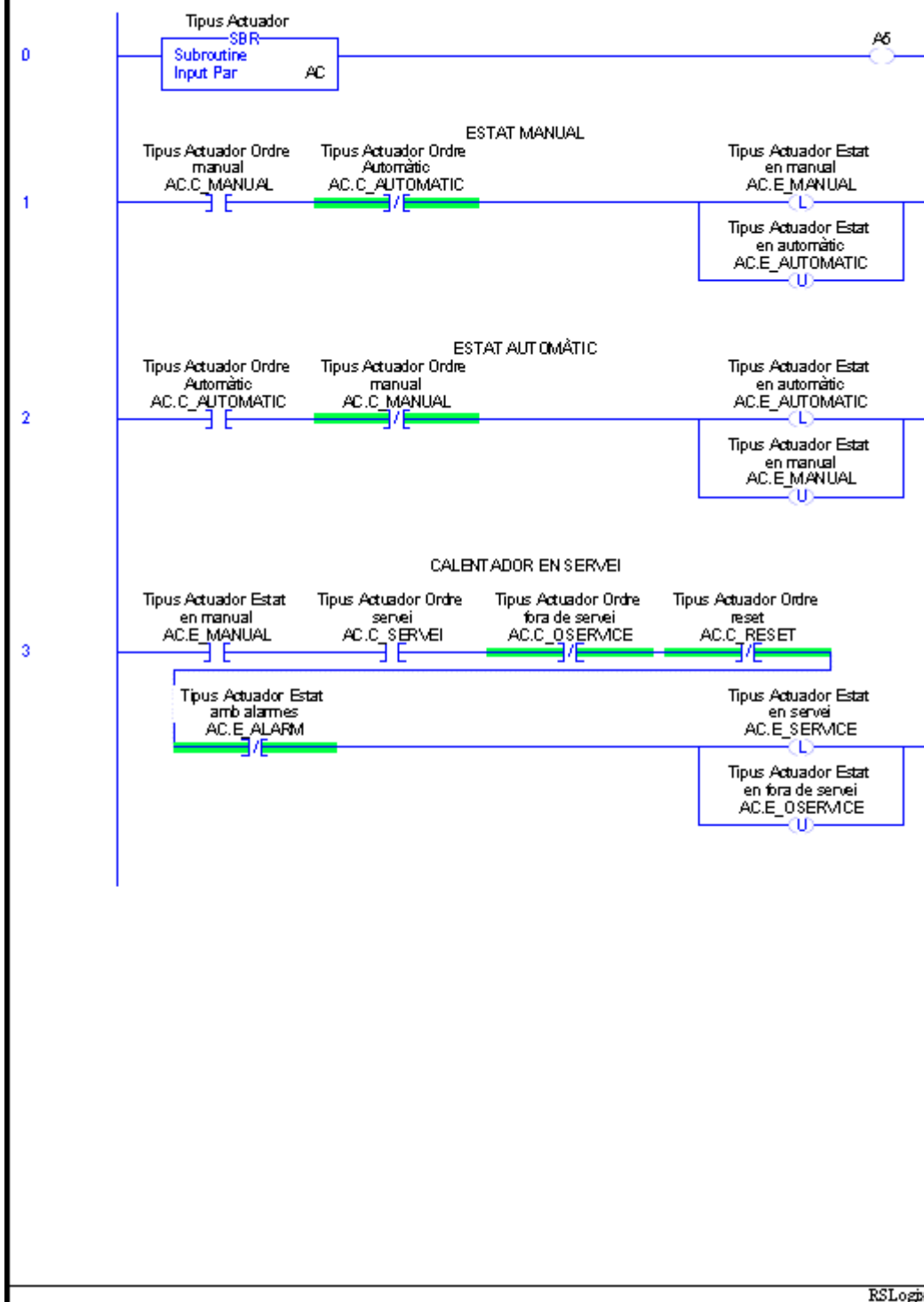
Page 156

Figbo:MainTask:MainProgram

01/01/2017 14:19:28

Total number of rungs in routine: 16

C:\Documents and Settings\Administrador\Escritorio\figbo\_ACD



## 06\_AC - Ladder Diagram

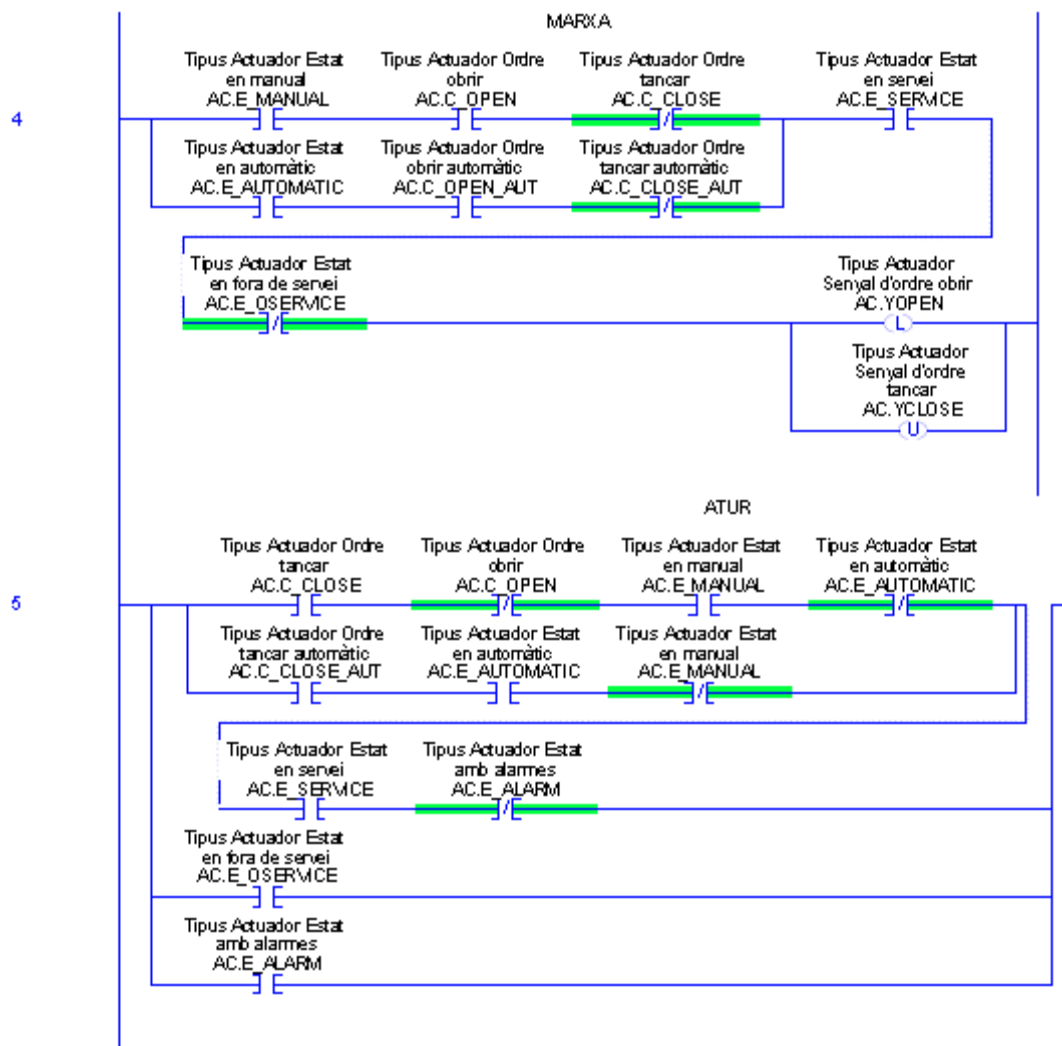
figbo:MainTask:MainProgram

Total number of rungs in routine: 16

Page 157

01/01/2017 14:19:28

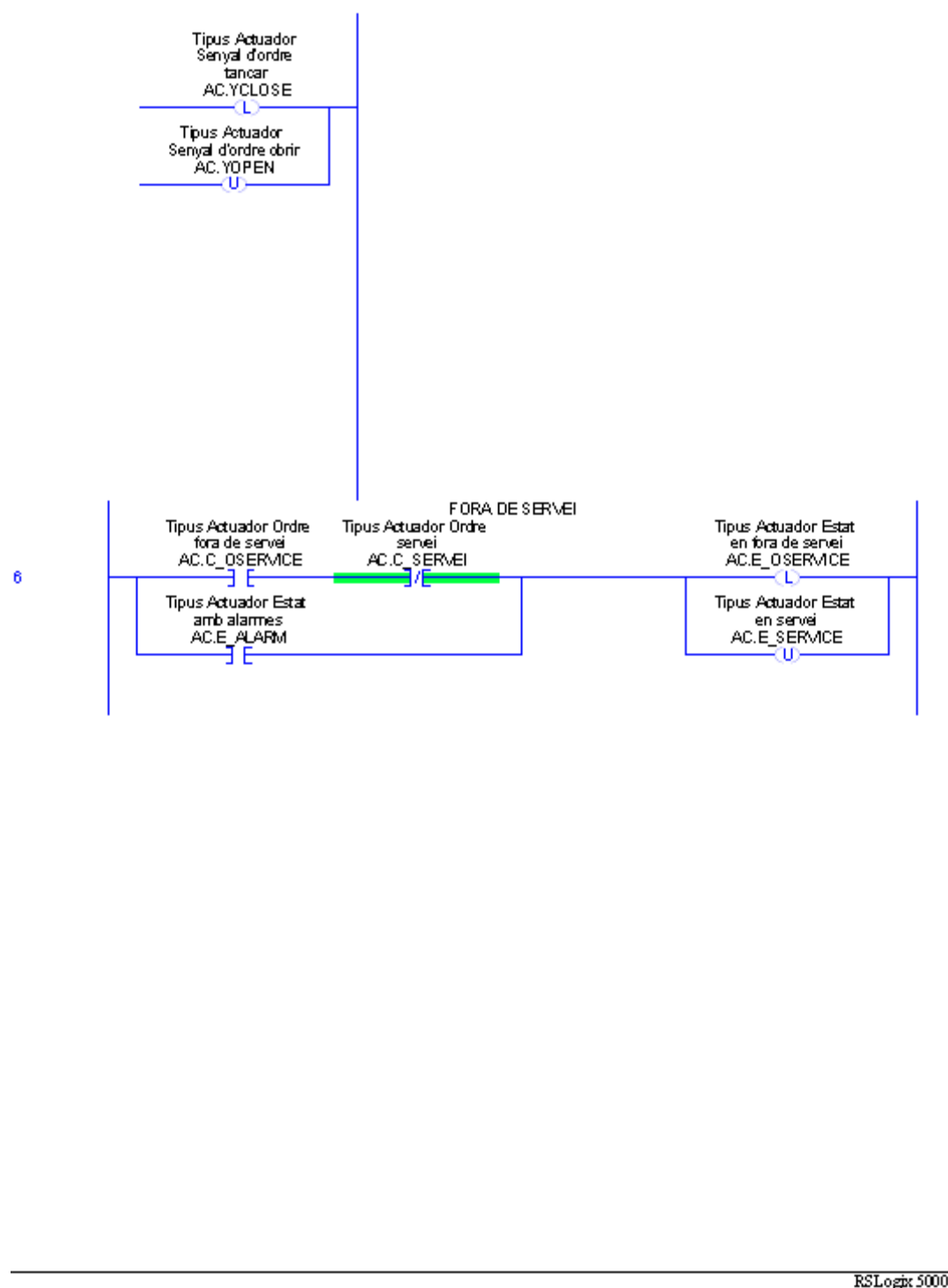
C:\Documents and Settings\Administrador\Escriptori\figbo.ACD



RSLogix 5000

00\_AL - Ladder Diagram  
 gbo:MainTask:MainProgram  
 total number of rungs in routine: 16

Page 158  
 01/01/2017 14:19:28  
 C:\Documents and Settings\Administrador\Escriptori\figbo\_ACD



## 06.AC - Ladder Diagram

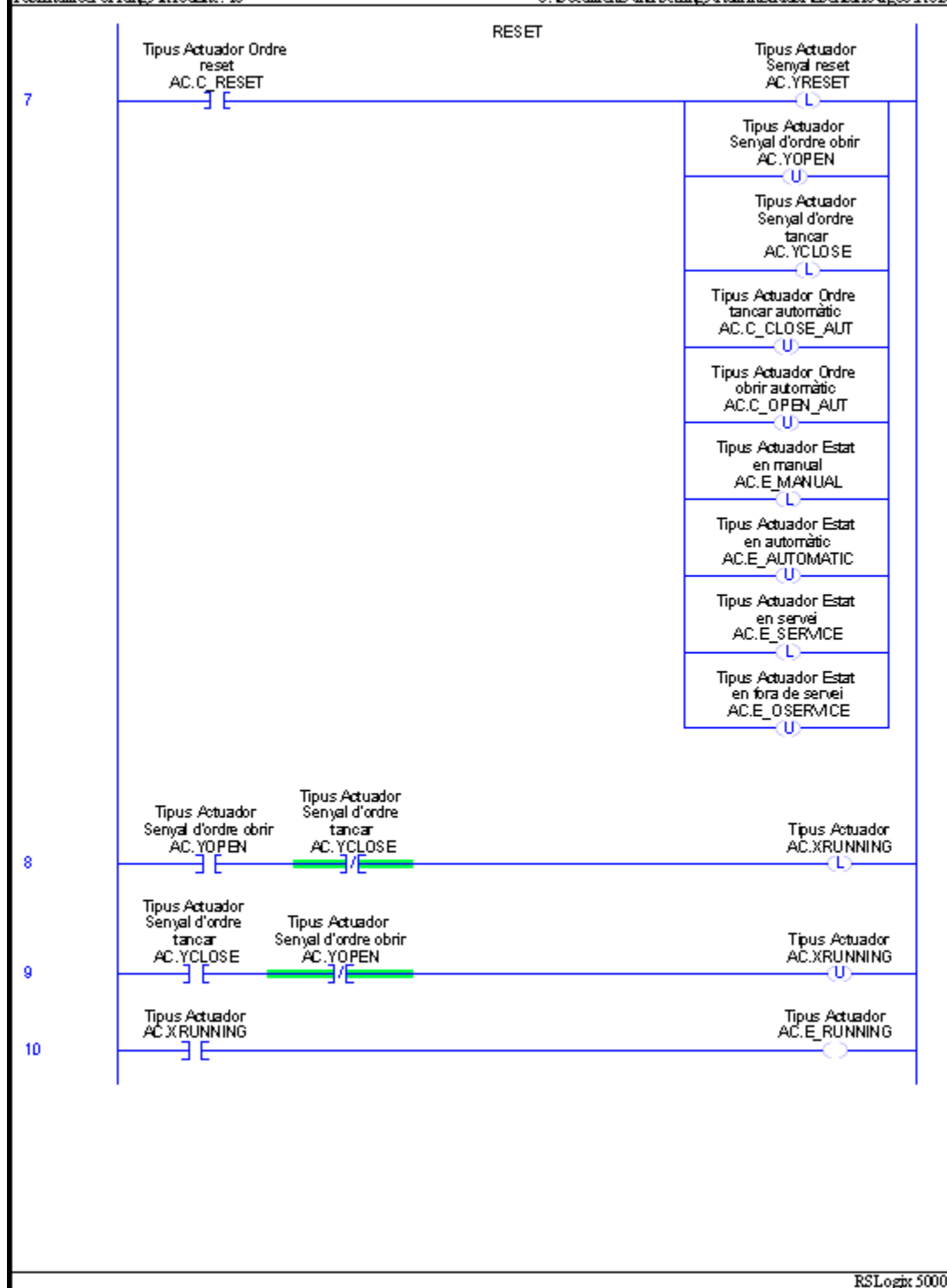
Figbo:MainTask:MainProgram

Total number of rungs in routine: 16

Page 159

01/01/2017 14:19:28

C:\Documents and Settings\Administrador\Escriptori\Figbo.ACD



## 06\_AC - Ladder Diagram

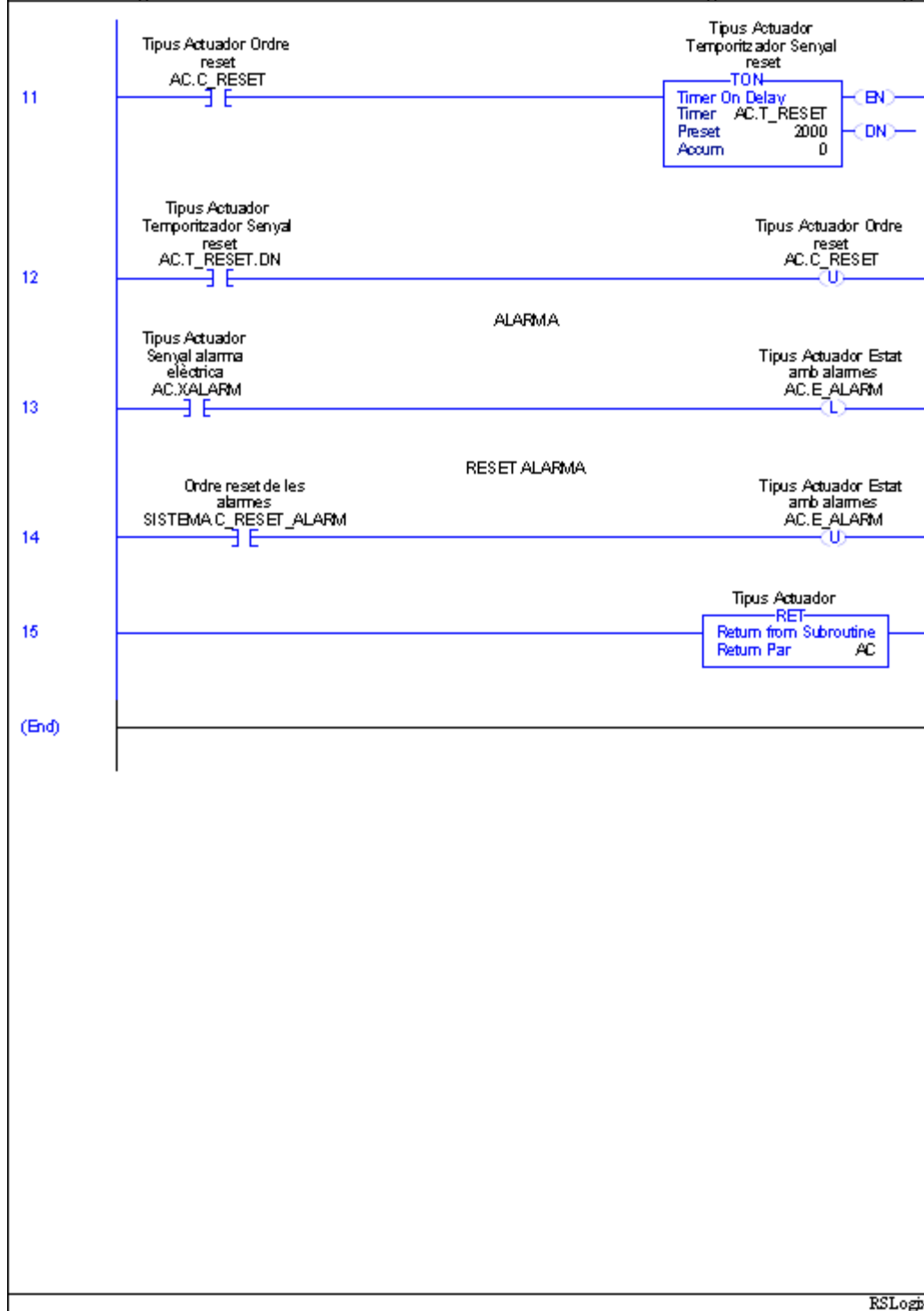
Figbo: MainTask: MainProgram

Total number of rungs in routine: 16

Page 160

01/01/2017 14:19:29

C:\Documents and Settings\Administrador\Escritorio\Figbo\_A.CD





## **BOMBES**

## 07\_B- Ladder Diagram

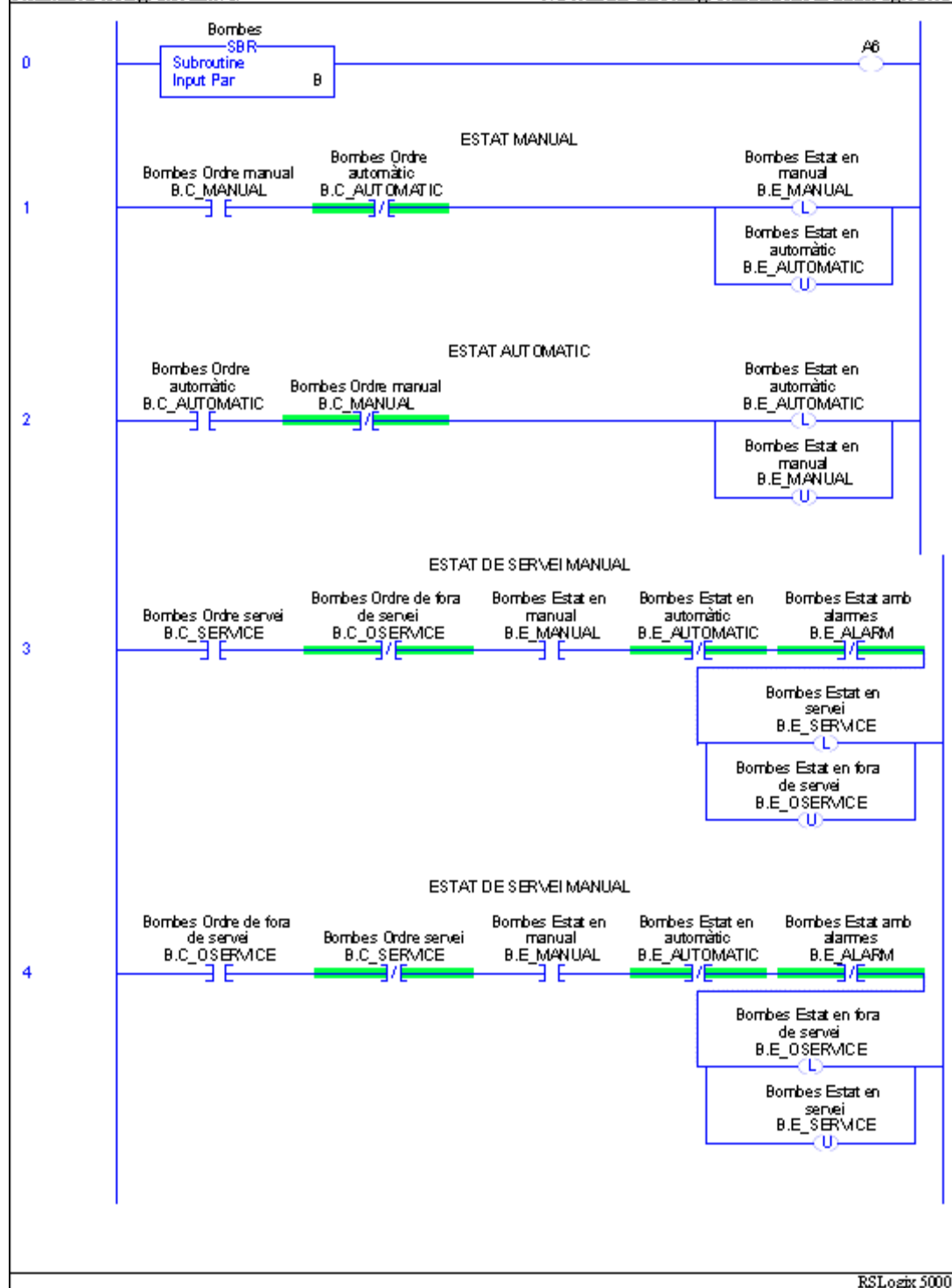
Page 161

Figbo:MainTask:MainProgram

01/01/2017 14:19:29

Total number of rungs in routine: 17

C:\Documents and Settings\Administrador\Escritorio\Figbo\_A.CD



RSLogix 5000

## L07\_B- Ladder Diagram

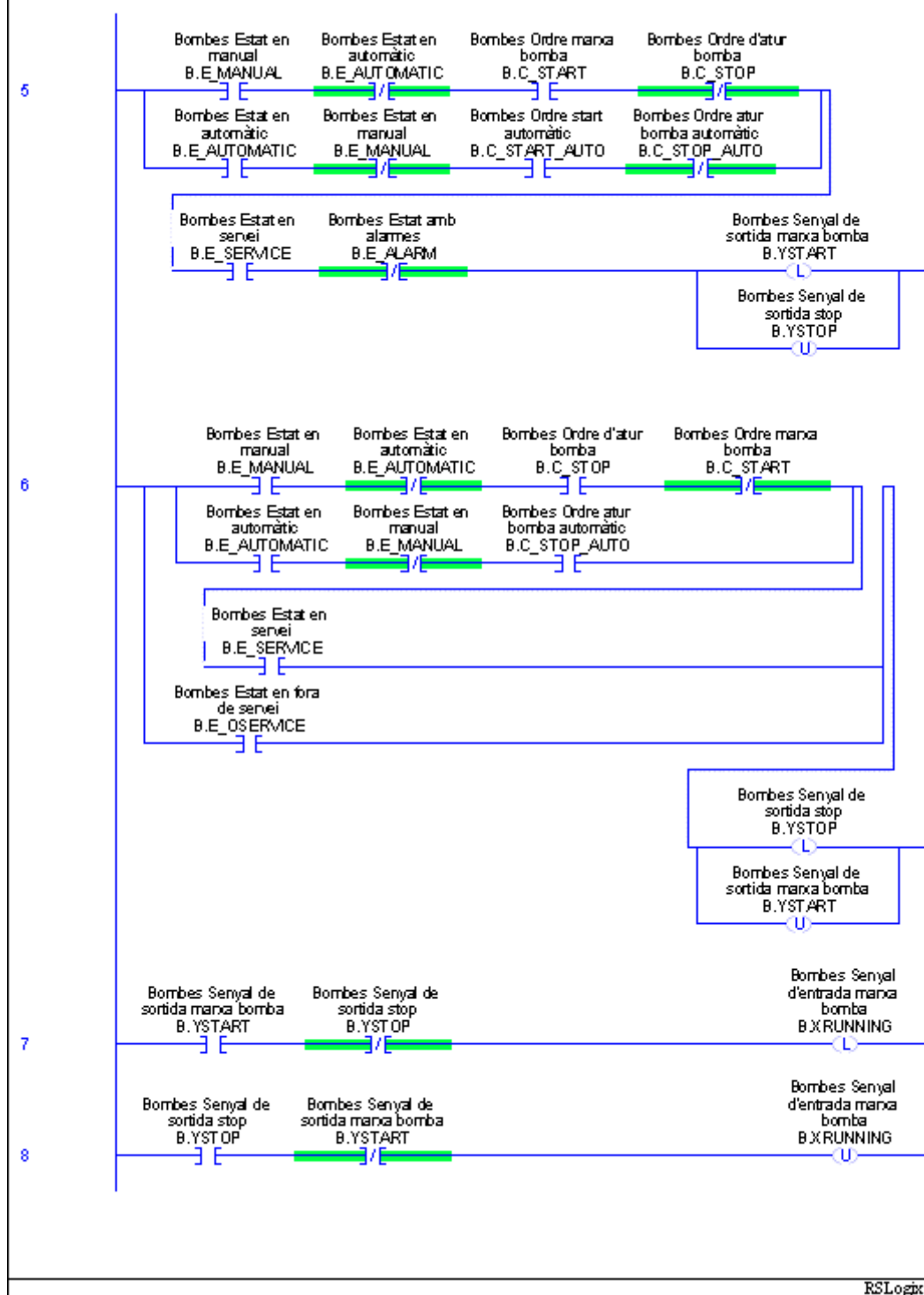
Figbo:MainTask:MainProgram

Total number of rungs in routine: 17

Page 162

01/01/2017 14:19:30

C:\Documents and Settings\Administrador\Escriptorio\Figbo\_A.CD



RSLogix 5000

## 07\_B - Ladder Diagram

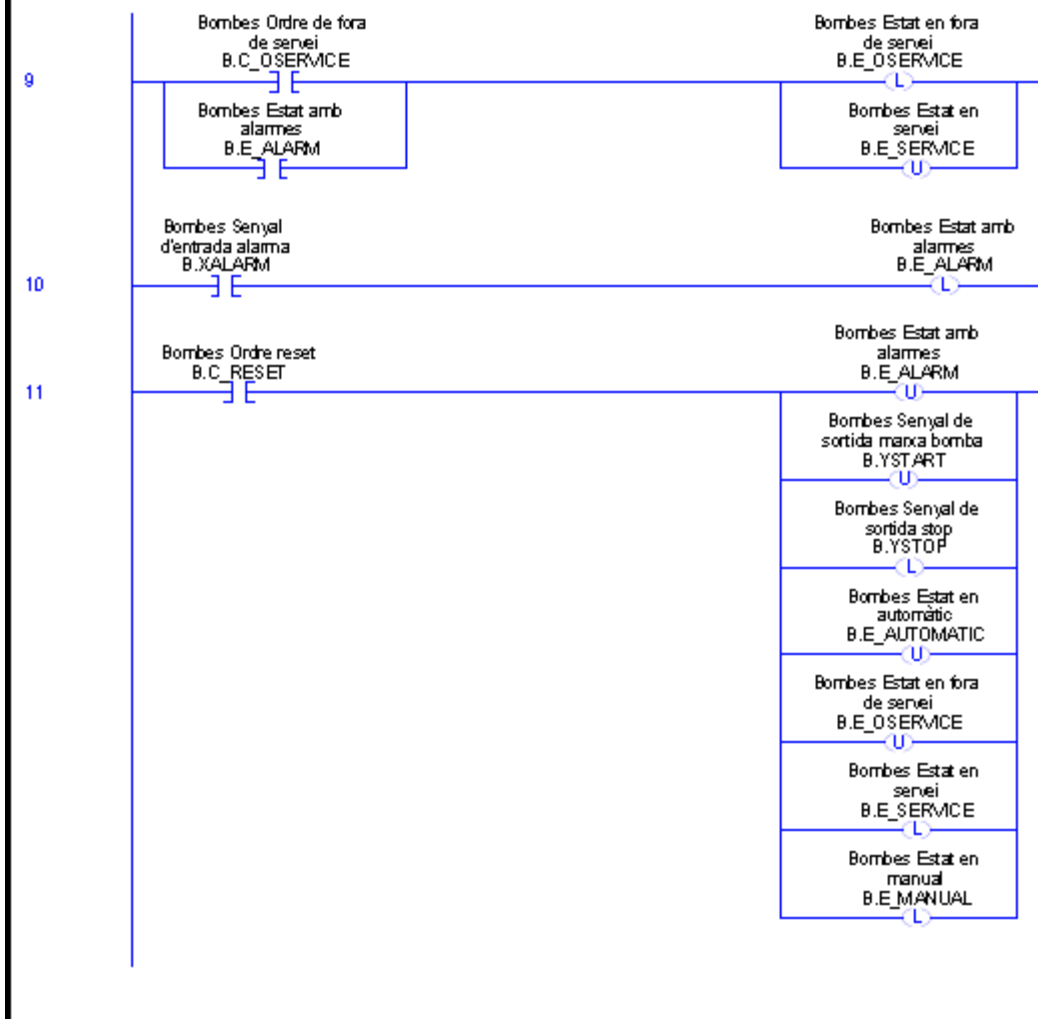
Page 163

figbo.MainTask.MainProgram

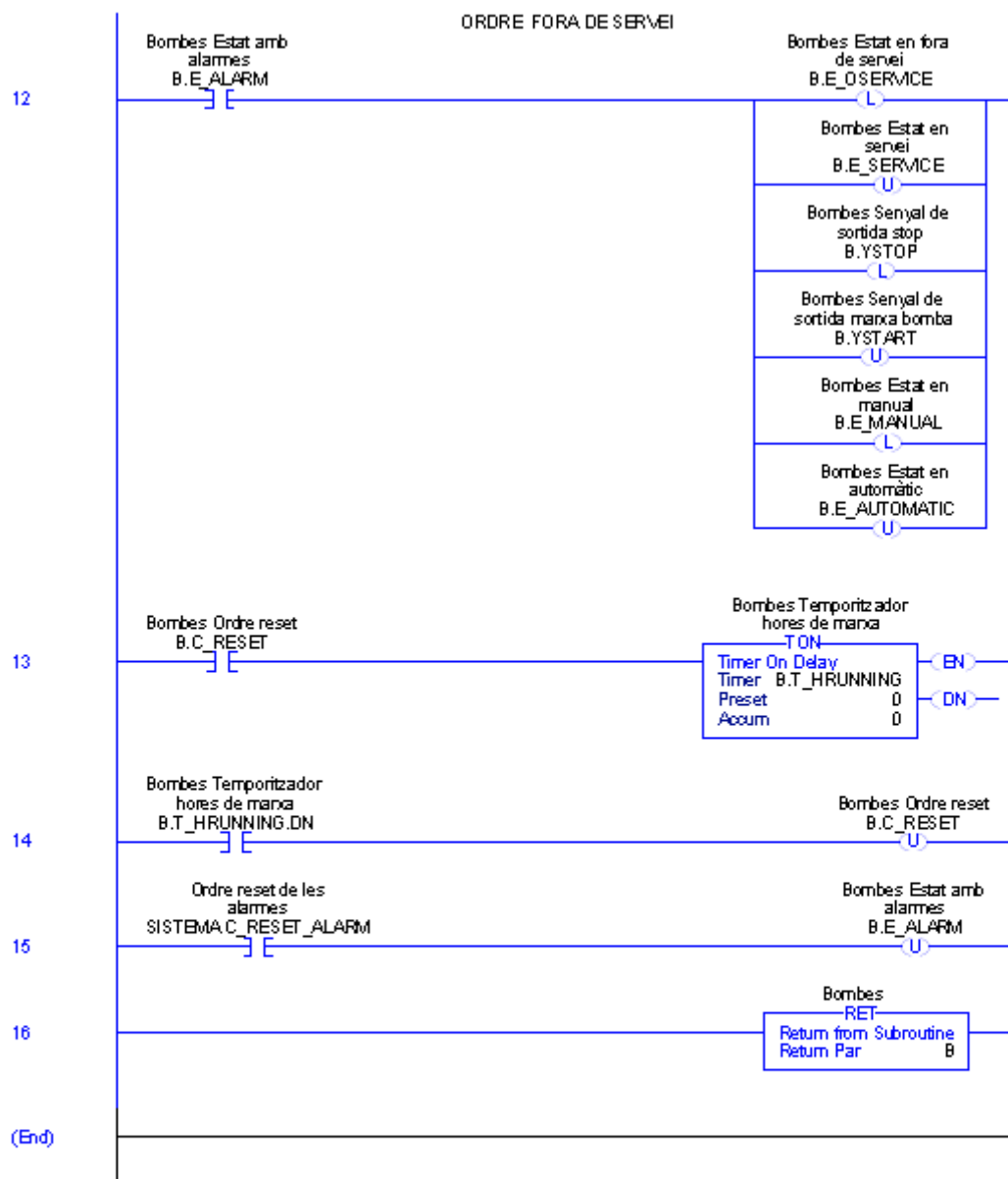
01/01/2017 14:19:30

Total number of rungs in routine: 17

C:\Documents and Settings\Administrador\Escritorio\figbo.ACD



U1\_15 - Ladder diagram Page 104  
 figbo:MainTask:MainProgram 01/01/2017 14:19:30  
 Total number of rungs in routine: 17 C:\Documents and Settings\Administrador\Escritori\figbo.ACD



## **SORTIDES**

## 08 SORTIDES - Ladder Diagram

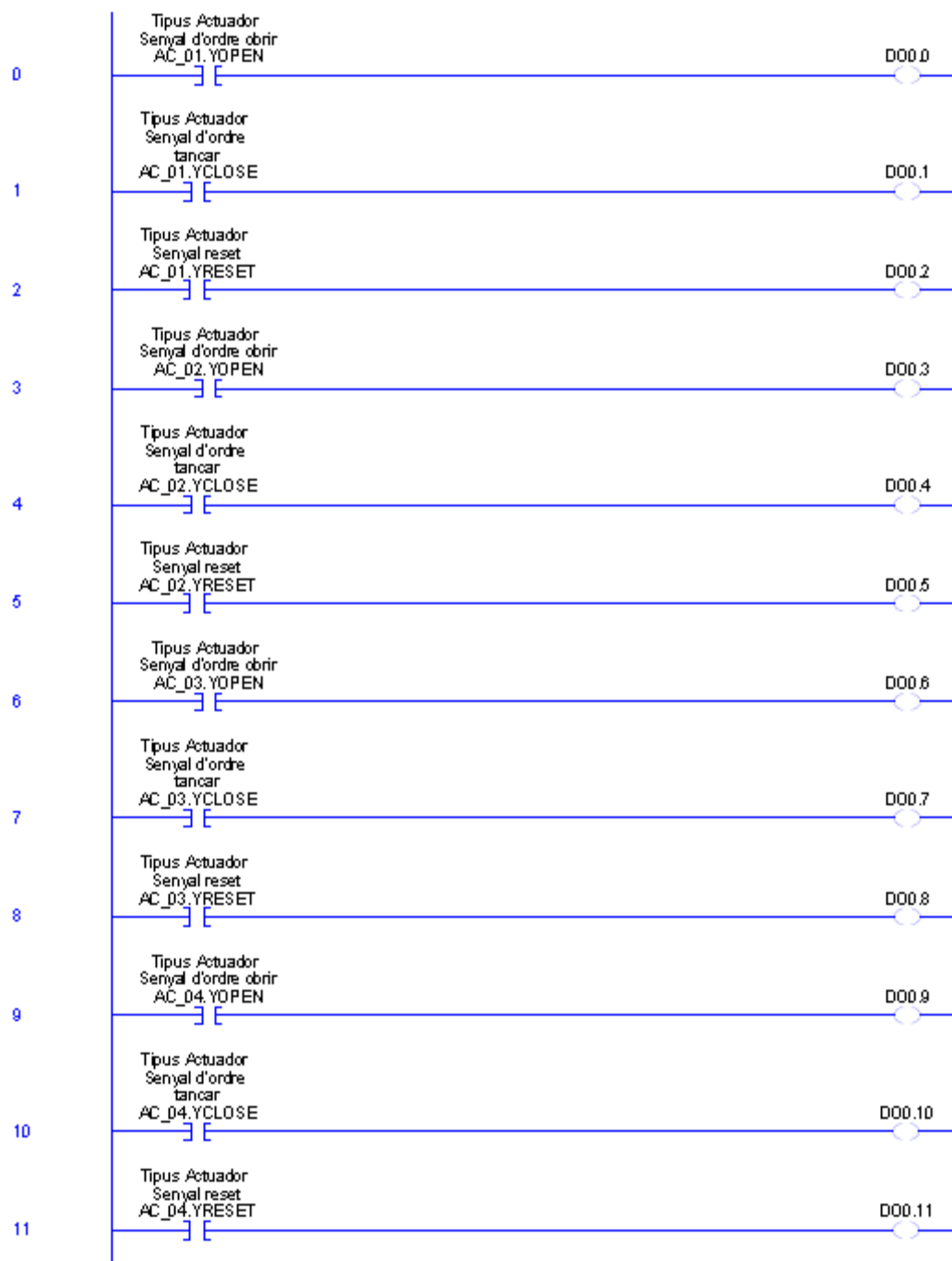
figbo:MainTask.MainProgram

Total number of rungs in routine: 99

Page 165

01/01/2017 14:19:31

C:\Documents and Settings\Administrador\Escritori\figbo.ACD



RSLogix 5000





## 06 SORTIDES - Ladder Diagram

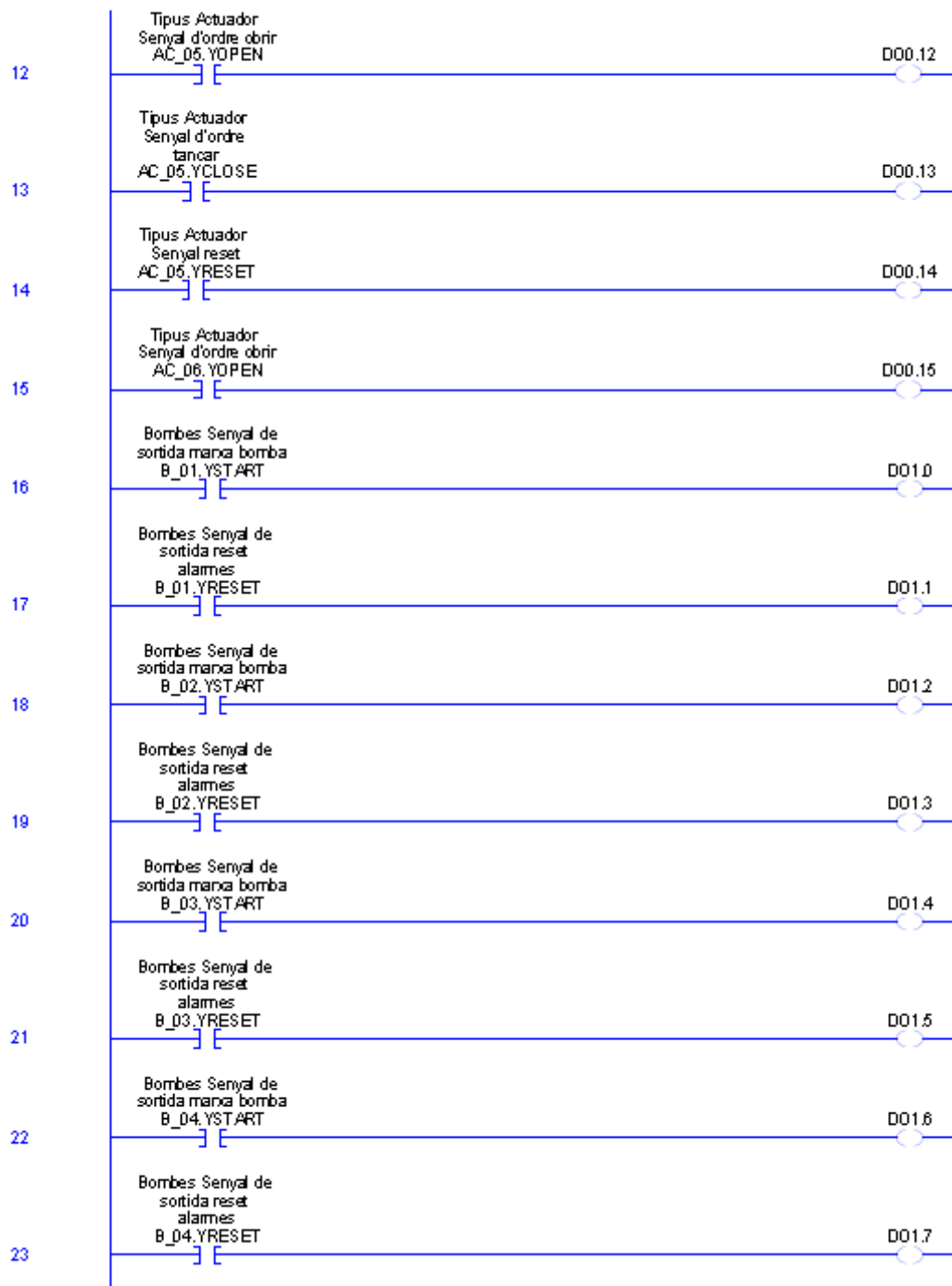
figbo.MainTask.MainProgram

Total number of rungs in routine: 99

Page 166

01/01/2017 14:19:31

C:\Documents and Settings\Administrador\Escritorio\figbo.ACD



16 RUNTIMES - Ladder Diagram

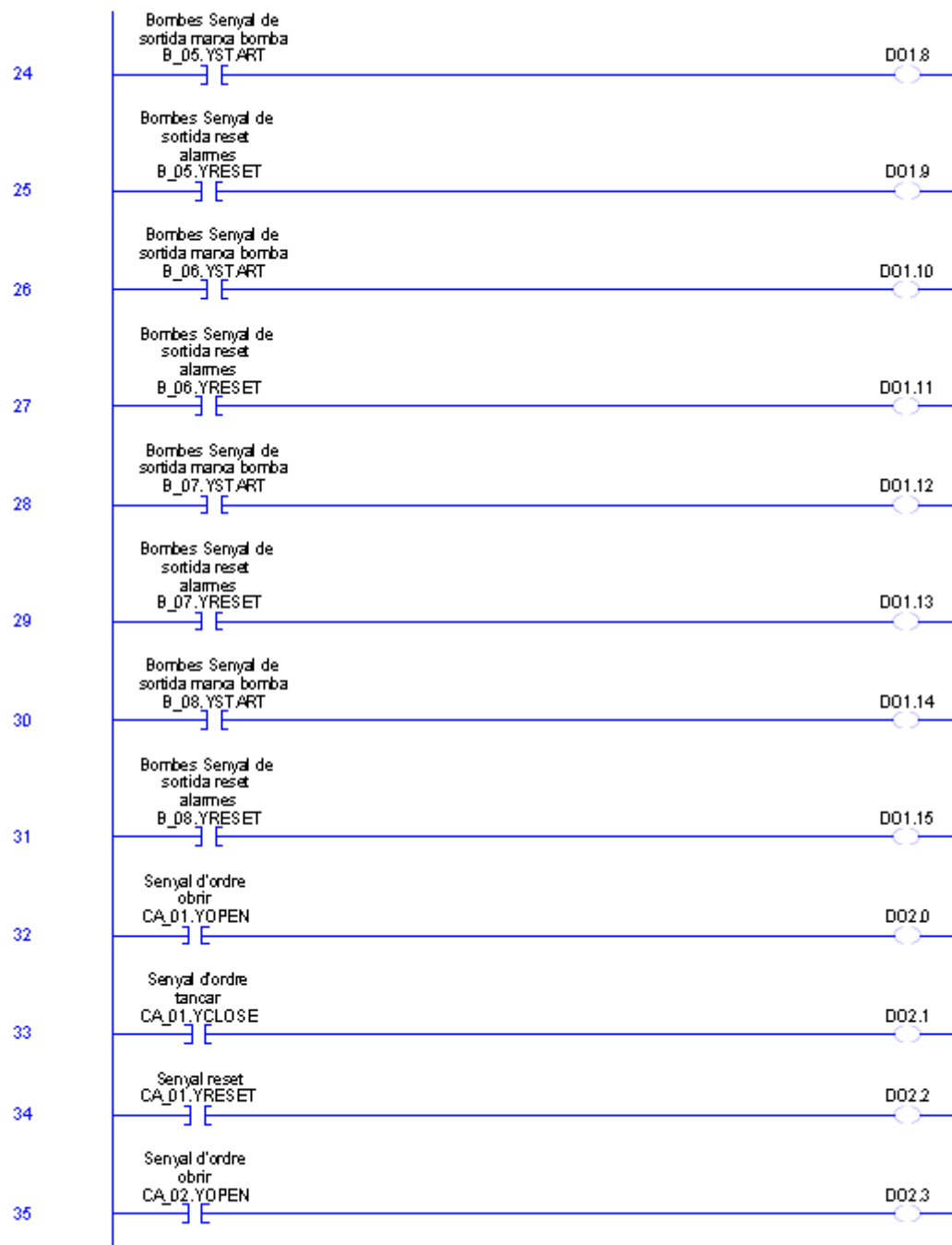
figbo:MainTask:MainProgram

Total number of rungs in routine: 99

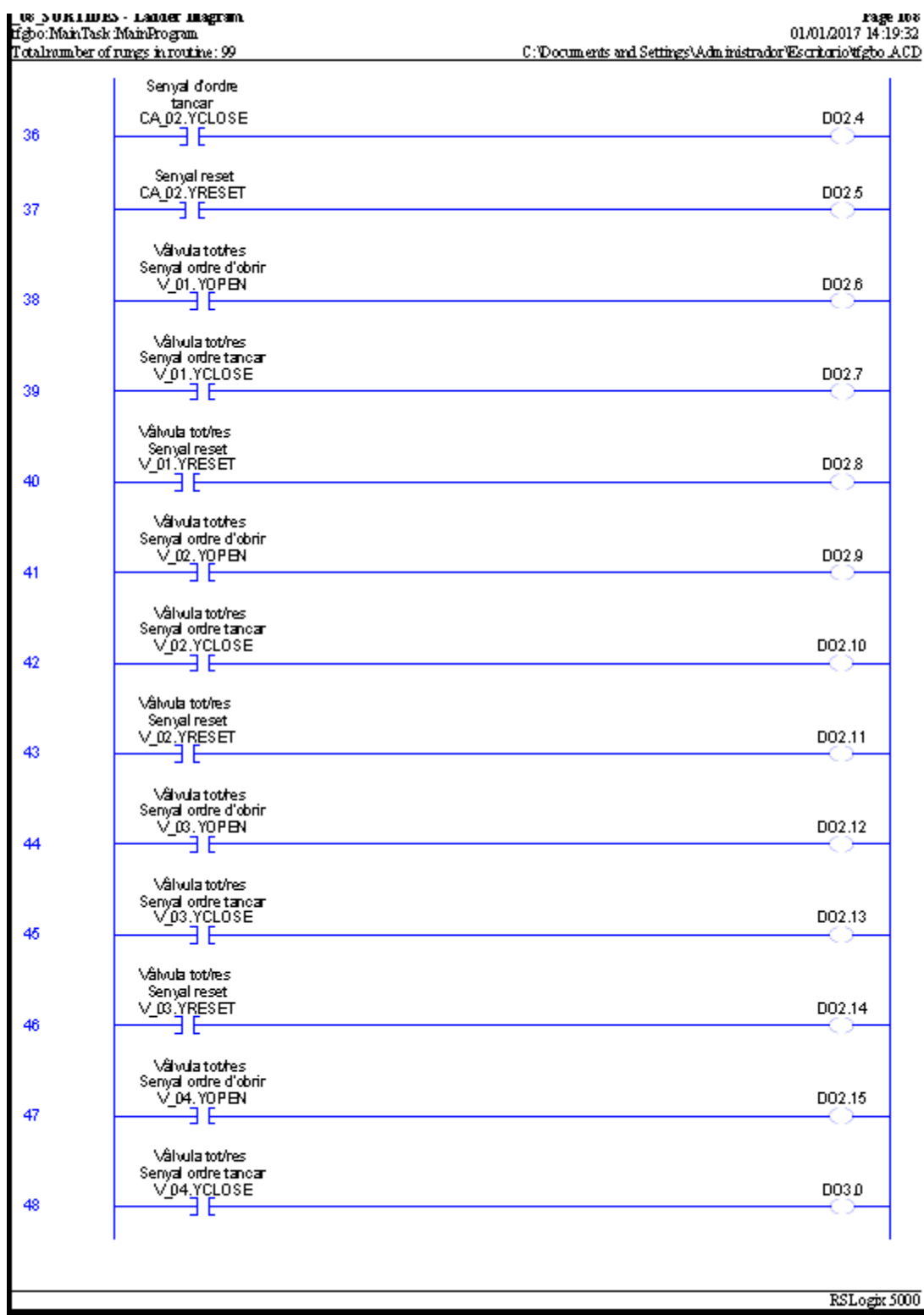
Page 10

01/01/2017 14:19:3

C:\Documents and Settings\Administrador\Escritorio\figbo.AC



RSLogix 500

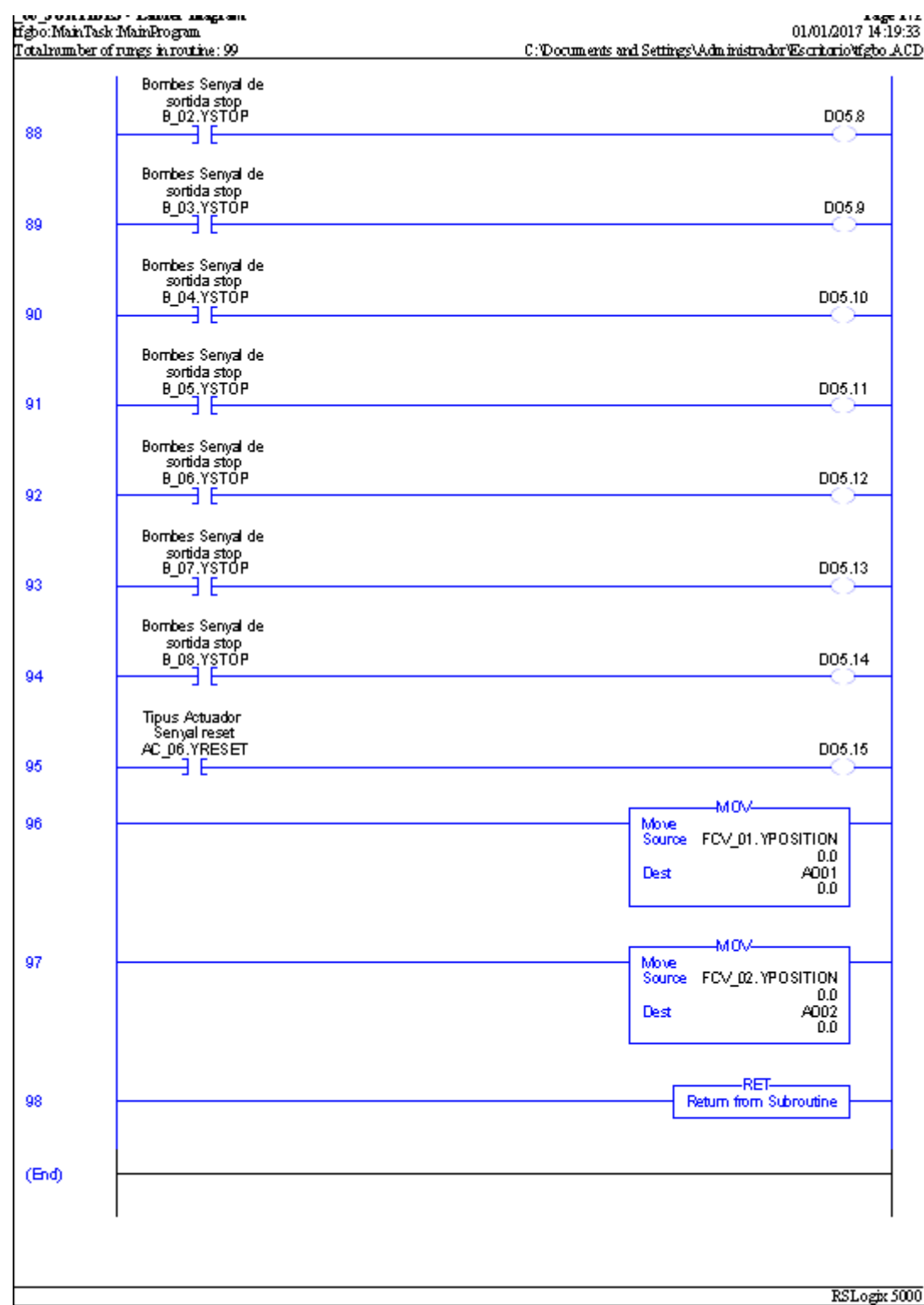






---

RSLogix 5000



*1.1.2. Automàtic.*

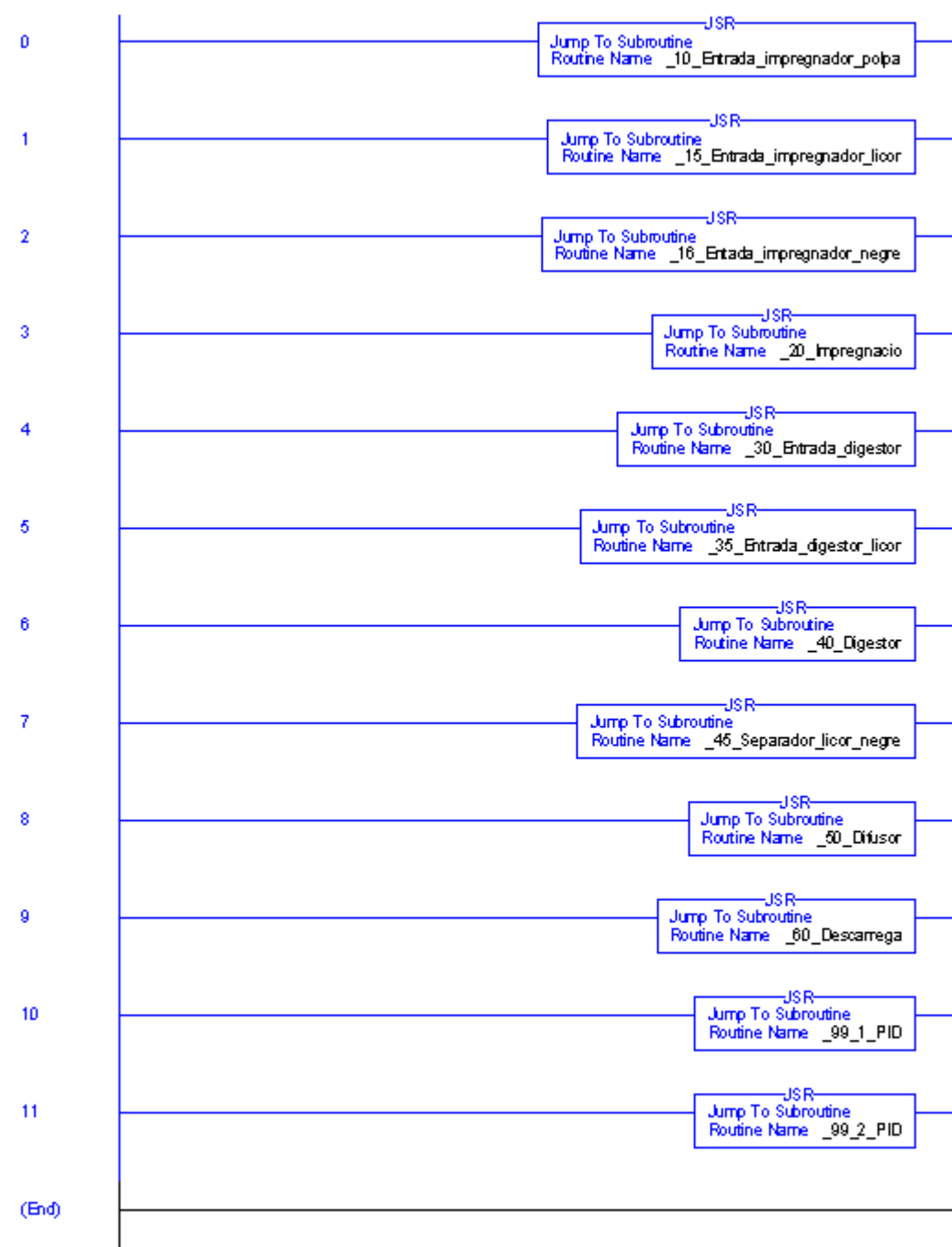
## **MAIN ROUTINE**



name: routine - Ladder Diagram  
 fgho: MainTaskAutomatic  
 Total number of rungs in routine: 12

Page 1/3  
 01/01/2017 14:19:35

C:\Documents and Settings\Administrador\Escritori\Wfgho.ACD



RSLogix 5000

## **ENTRADA IMPREGNADOR POLPA**

## 10 Entrada impregnador p opla- Ladder Diagram

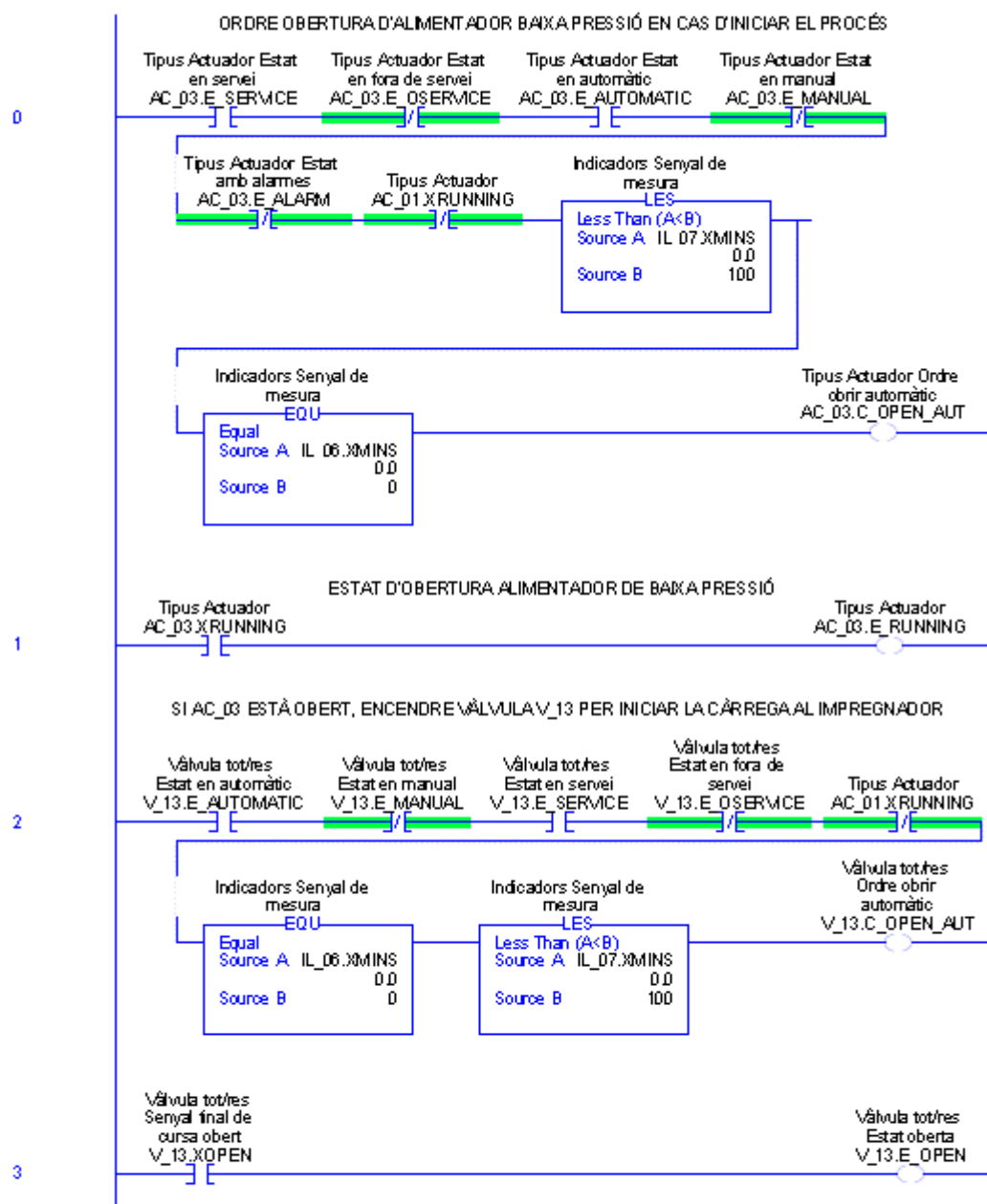
figbo:MainTask\_Automatic

Total number of rungs in routine: 7

Page 174

01/01/2017 14:19:47

C:\Documents and Settings\Administrador\Escritori\figbo\_ACD



RSLogix 5000

\_VV\_tancada\_mpregnador\_pcpa - Ladder diagram

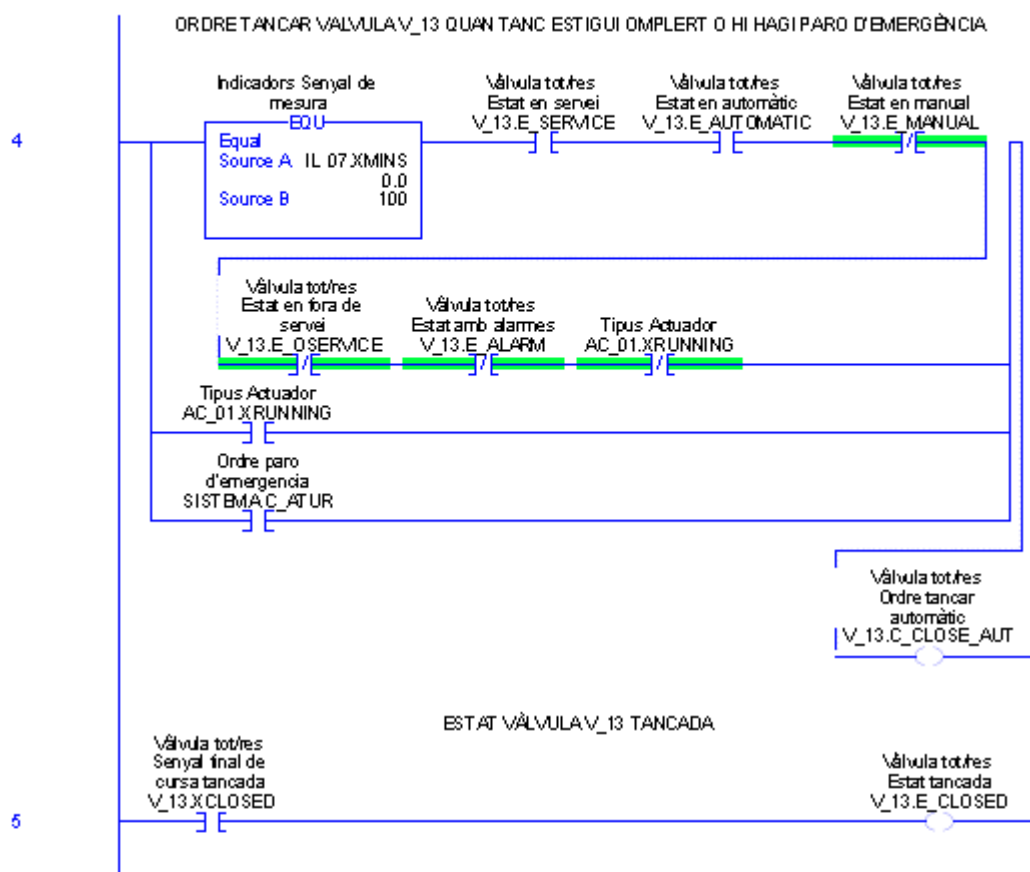
figbo:MainTask:Automatic

Total number of rungs in routine: 7

Page 1/5

01/01/2017 14:19:48

C:\Documents and Settings\Administrador\Escritorio\figbo.ACD



RSLogix 5000

## 10 Entrada impregnador p dpa- Ladder Diagram

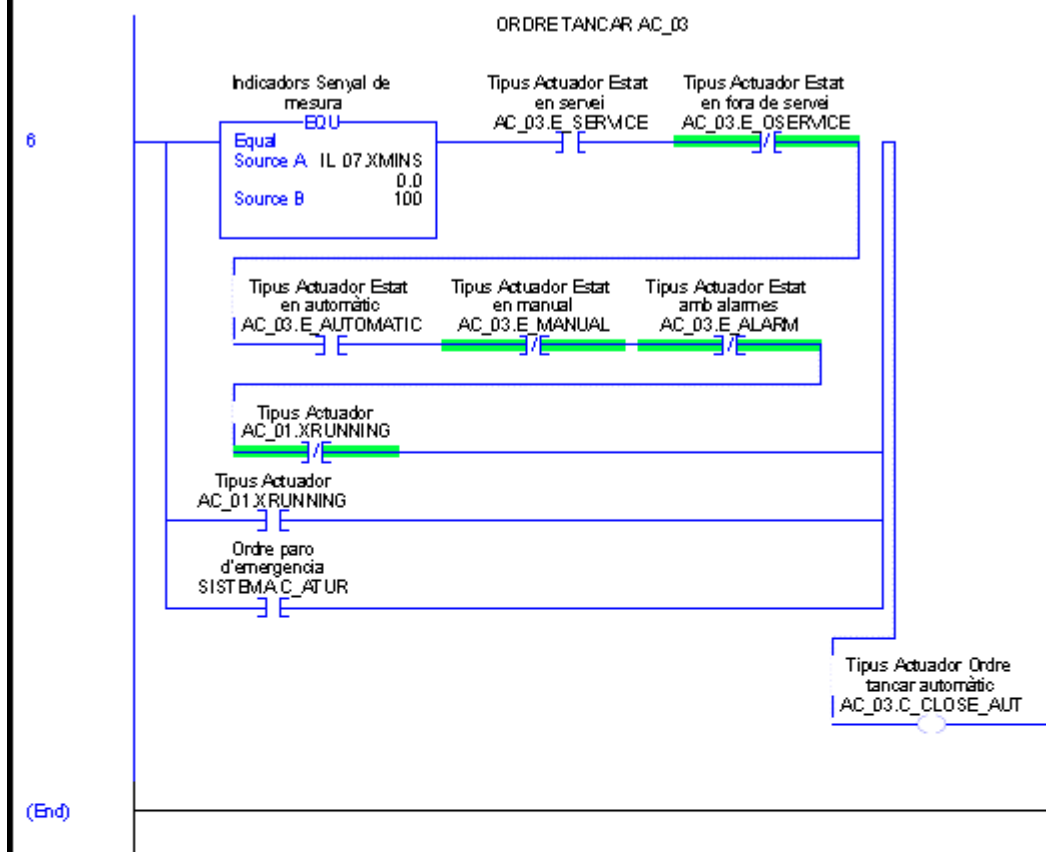
Figbo:MainTask:Automatic

Total number of rungs in routine: 7

Page 176

01/01/2017 14:19:48

C:\Documents and Settings\Administrador\Escriptorio\Figbo.ACD



RSLogix 5000

## **ENTRADA IMPREGNADOR LICOR**



15 - Control d'integrador\_nor - Ladder diagram

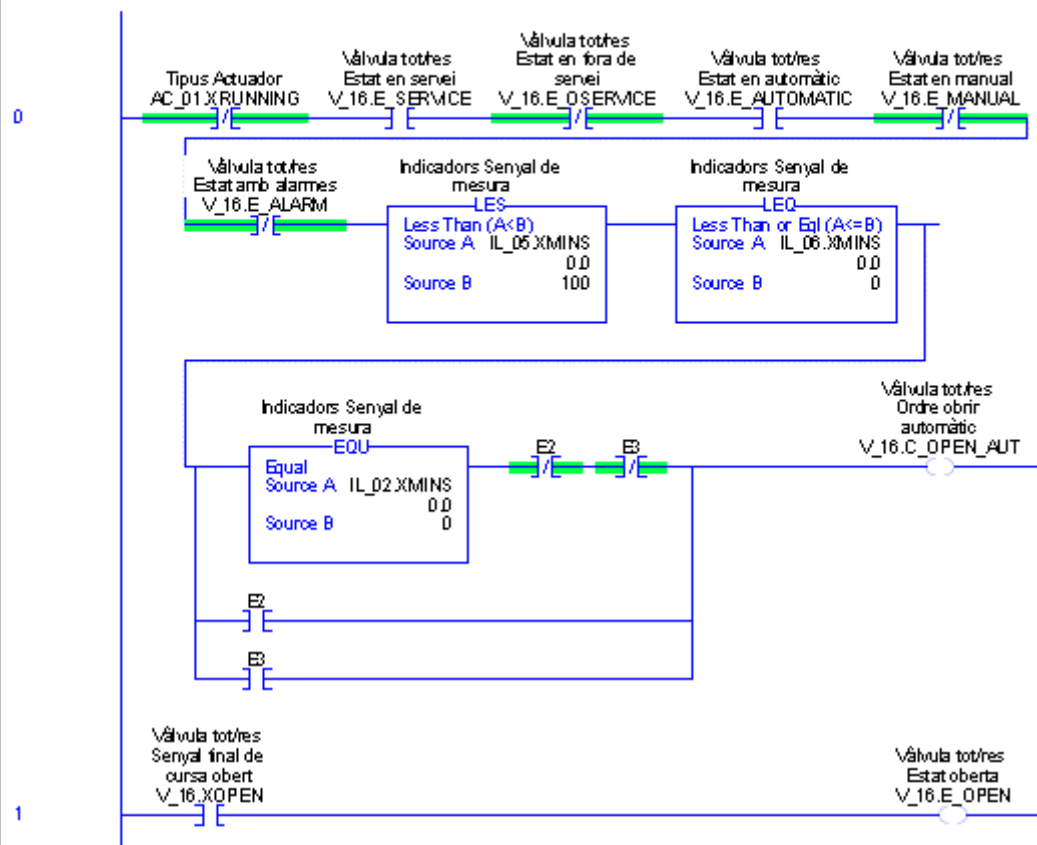
Figbo: MainTask: Automatic

Total number of rungs in routine: 4

Page 17

01/01/2017 14:19:48

C:\Documents and Settings\Administrador\Escritorio\Figbo\_ACI



RSLogix 500



**15 Entrada impregnador licor - Ladder Diagram**

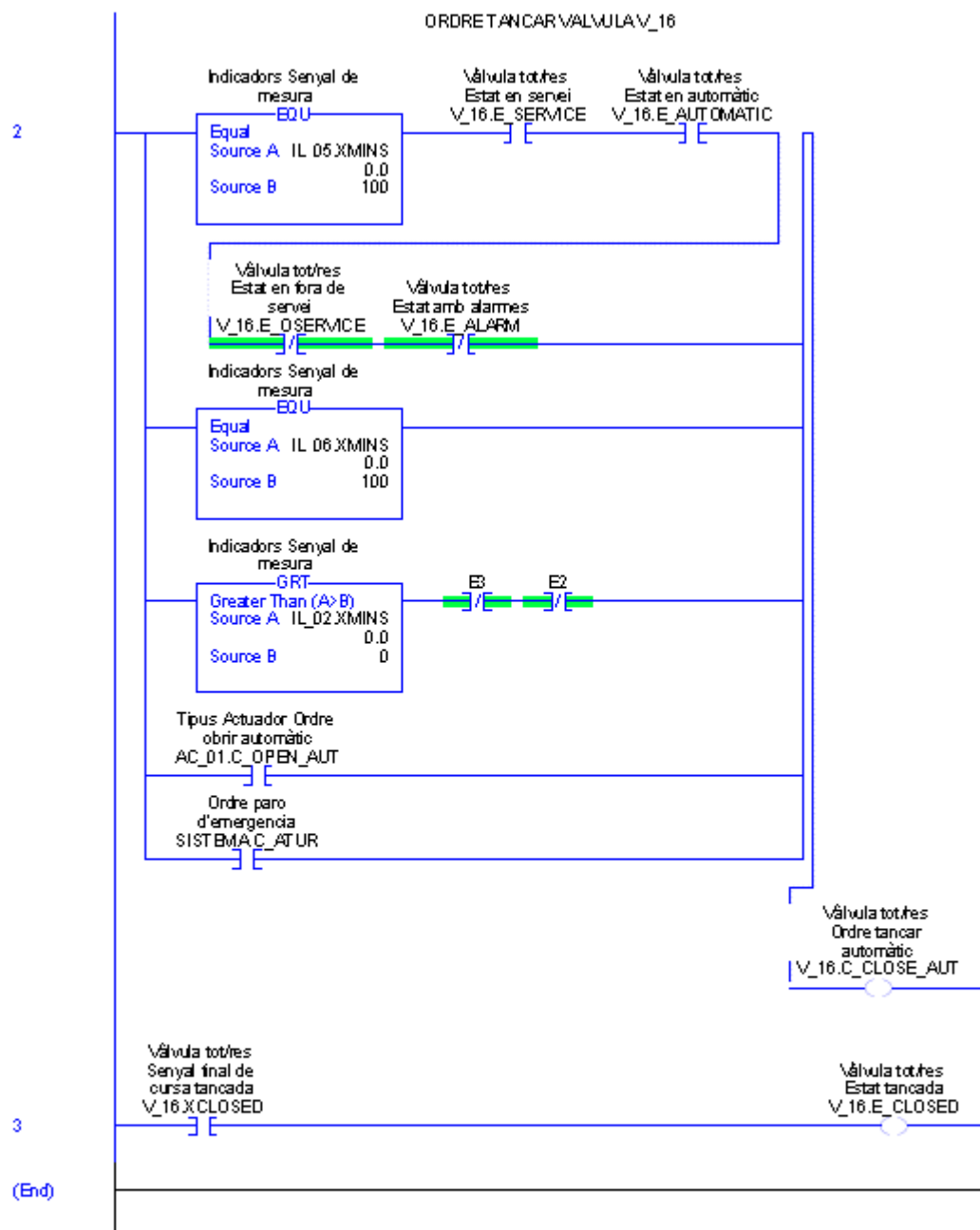
figbo:MainTask:Automatic

Total number of rungs in routine: 4

Page 178

01/01/2017 14:19:48

C:\Documents and Settings\Administrador\Escritorio\figbo\_ACD



RSLogix 5000

ENTRADA DE LICOR NEGRE A L'IMPREGNADOR

## 16 Entrada impregnador negre - Ladder Diagram

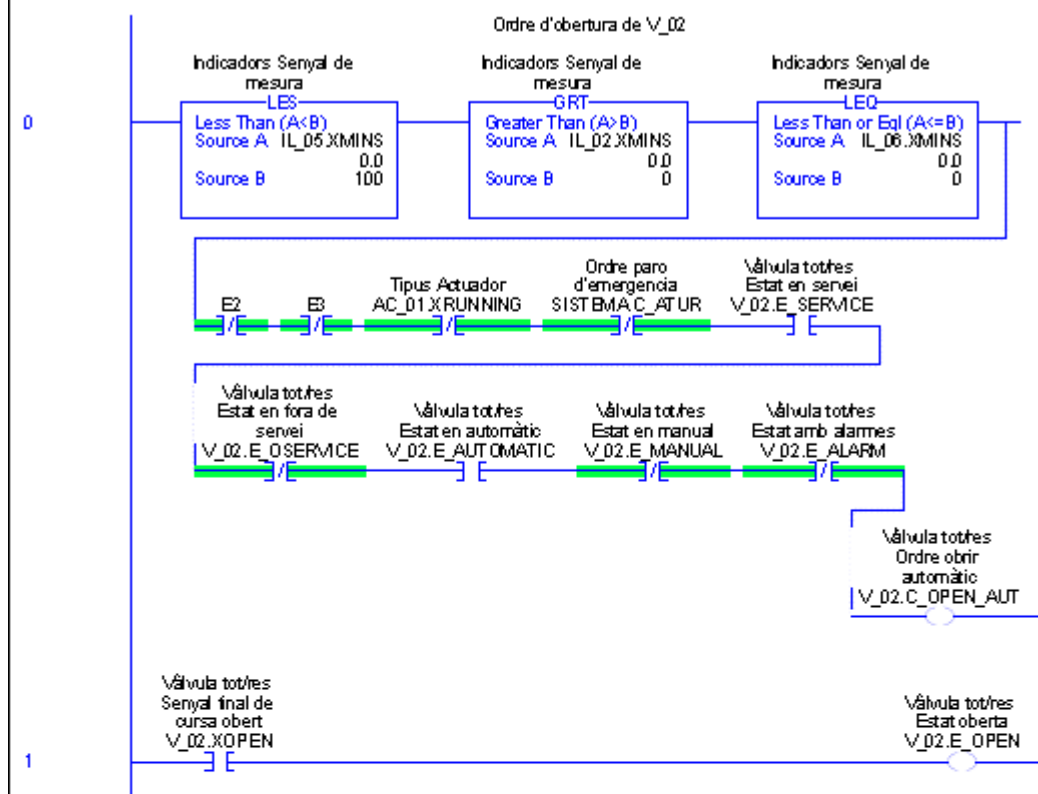
Page 179

Hobo: MainTask Automatic

01/01/2017 14:19:48

Total number of rungs in routine: 10

C:\Documents and Settings\Administrador\Escritorio\Hobo\_A.CD



RSLogix 5000

## 16 Entrada impregnador negre - Ladder Diagram

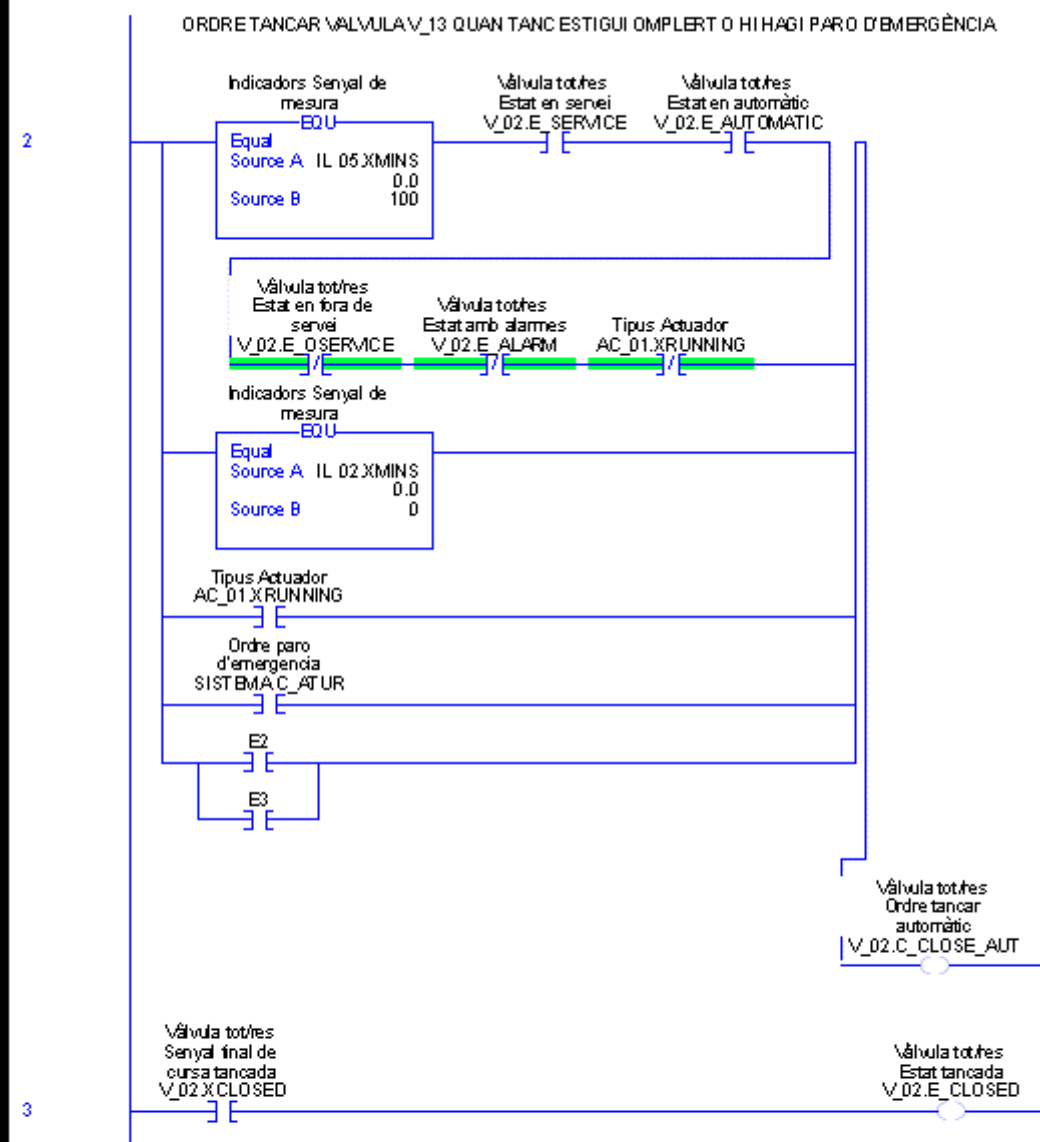
Page 180

Hobo:MainTask:Automatic

01/01/2017 14:19:49

Total number of rungs in routine: 10

C:\Documents and Settings\Administrador\Escritorio\Hobo\_ACD



RSLogix 5000

10 - Llançada impregnador negre - Ladder diagram

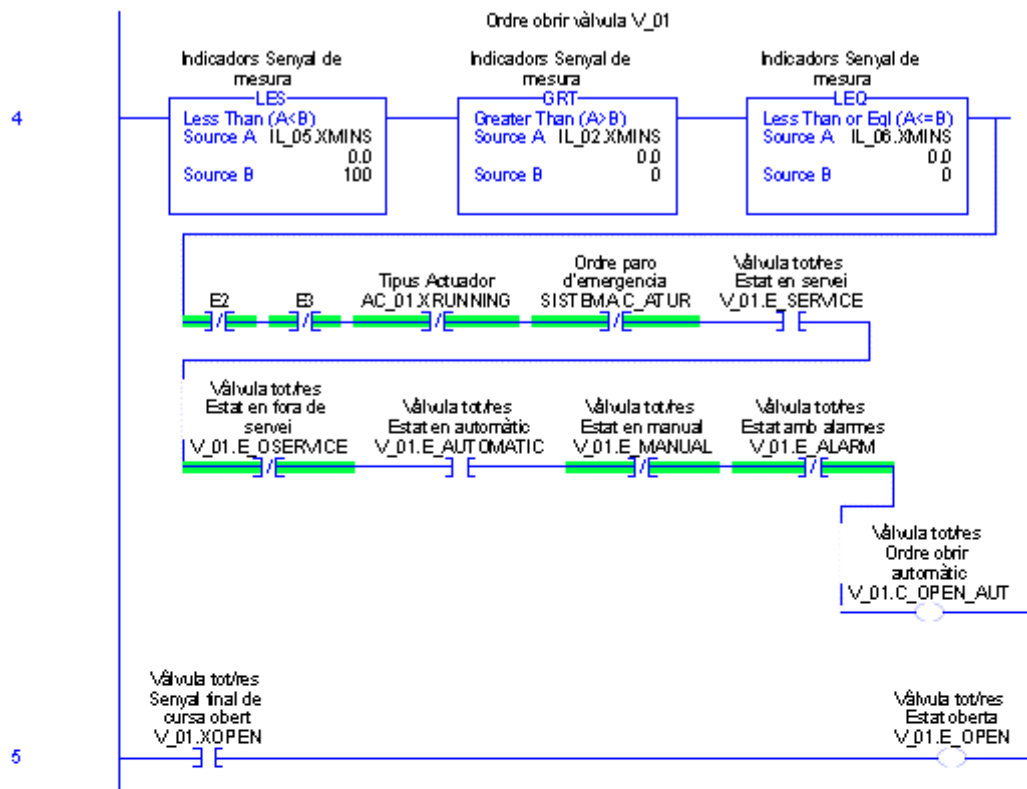
Page 181

figbo:MainTask:Automatic

01/01/2017 14:19:49

Total number of rungs in routine: 10

C:\Documents and Settings\Administrador\Escritori\figbo.ACD



RSLogix 5000

## 16\_Entrada impregnador negre- Ladder Diagram

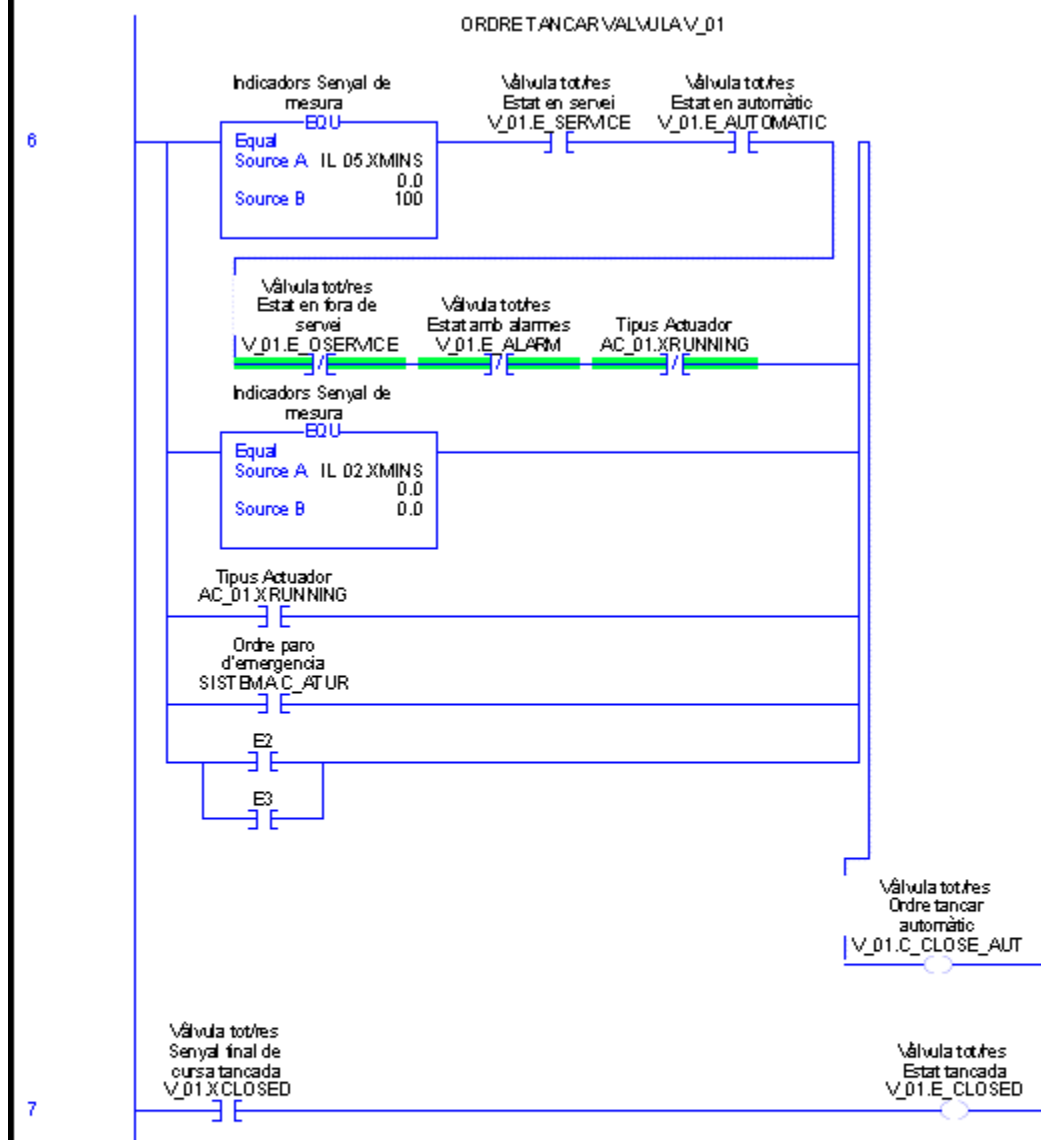
Page 182

Fgbo:MainTask Automatic

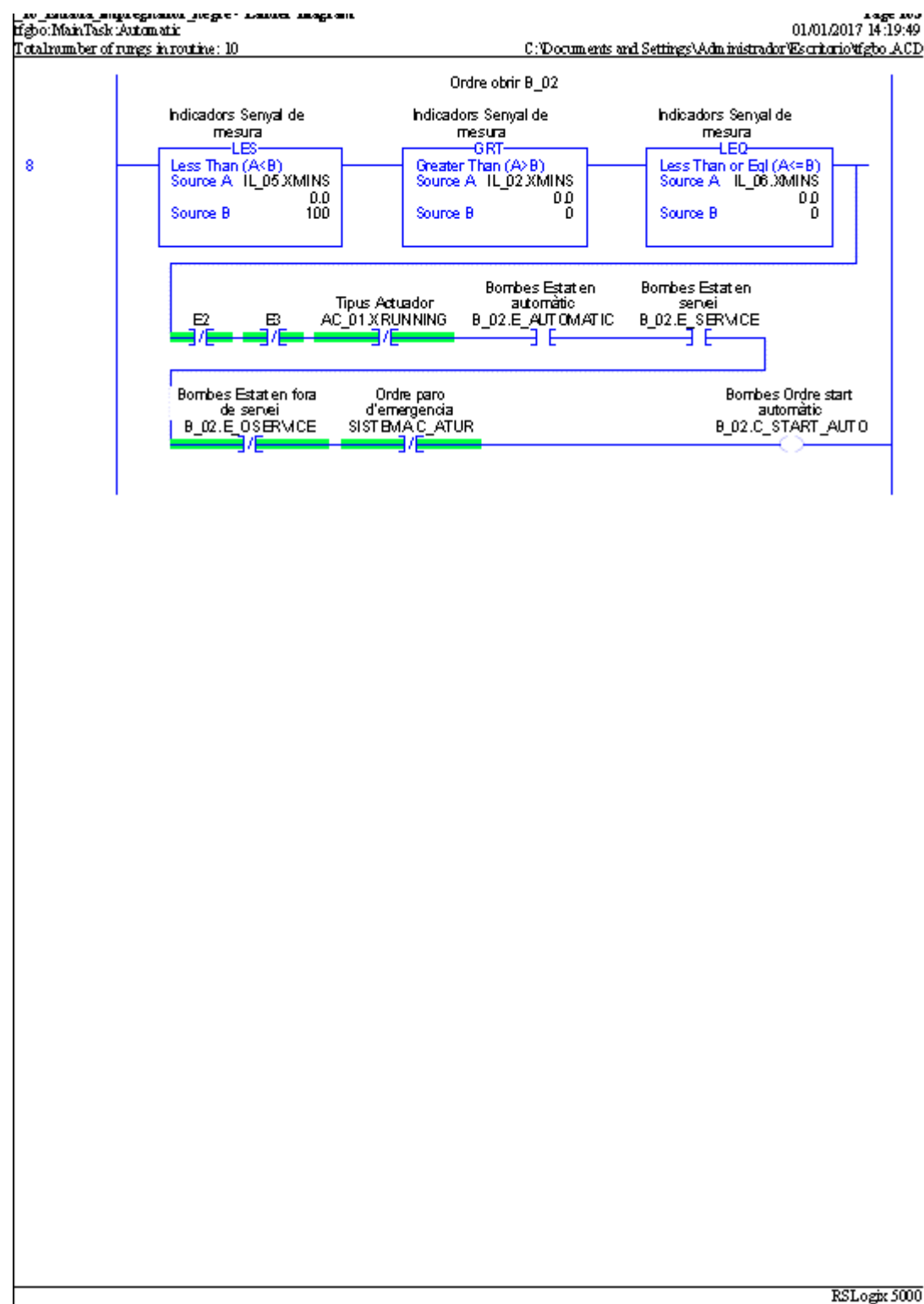
01/01/2017 14:19:49

Total number of rungs in routine: 10

C:\Documents and Settings\Administrador\Escritorio\Fgbo\_A.CD



RSLogix 5000



\_10\_Llançadora\_Impregnador\_negre - Lander diagram

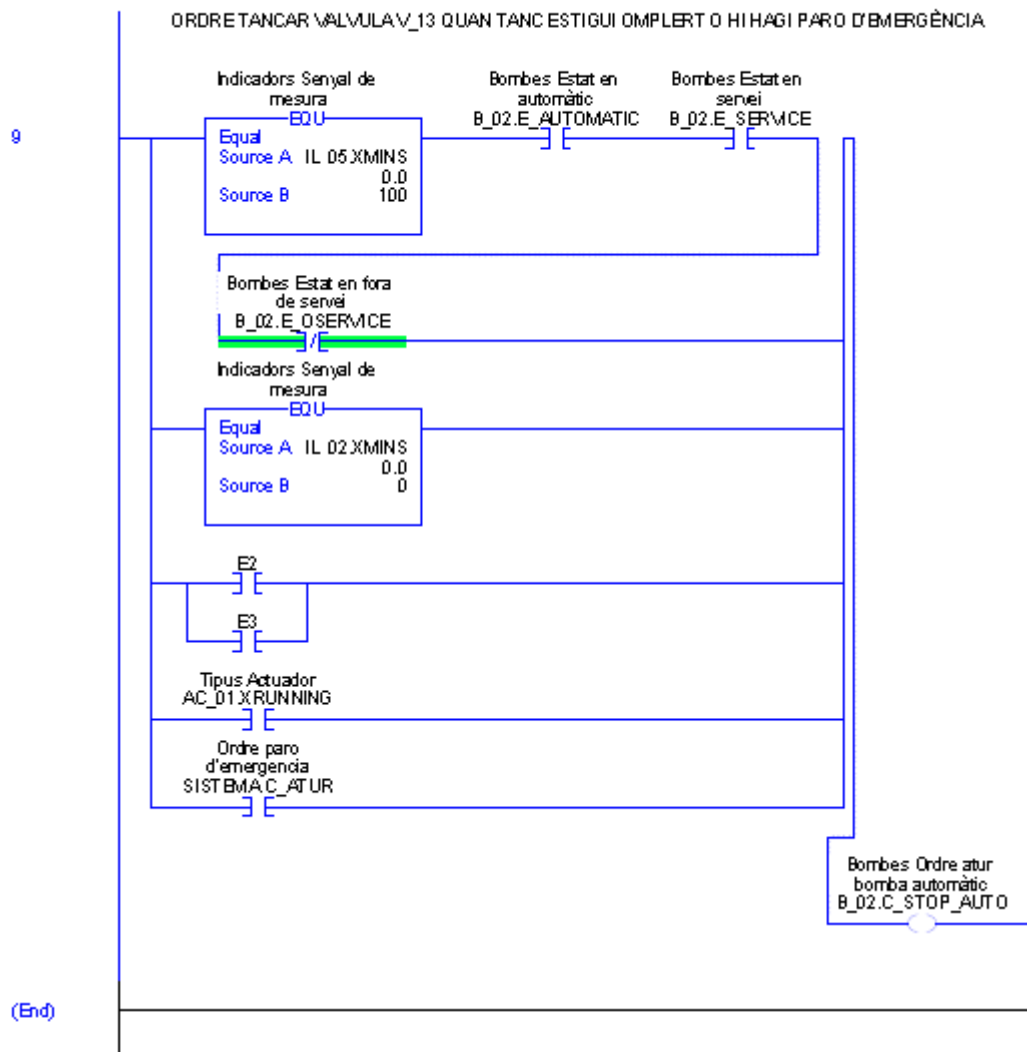
Page 184

figbo:MainTask:Automatic

01/01/2017 14:19:49

Total number of rungs in routine: 10

C:\Documents and Settings\Administrador\Escritorio\figbo\_ACD



RSLogix 5000



## **IMPREGNACIÓ**

## 20 Impregnació - Ladder Diagram

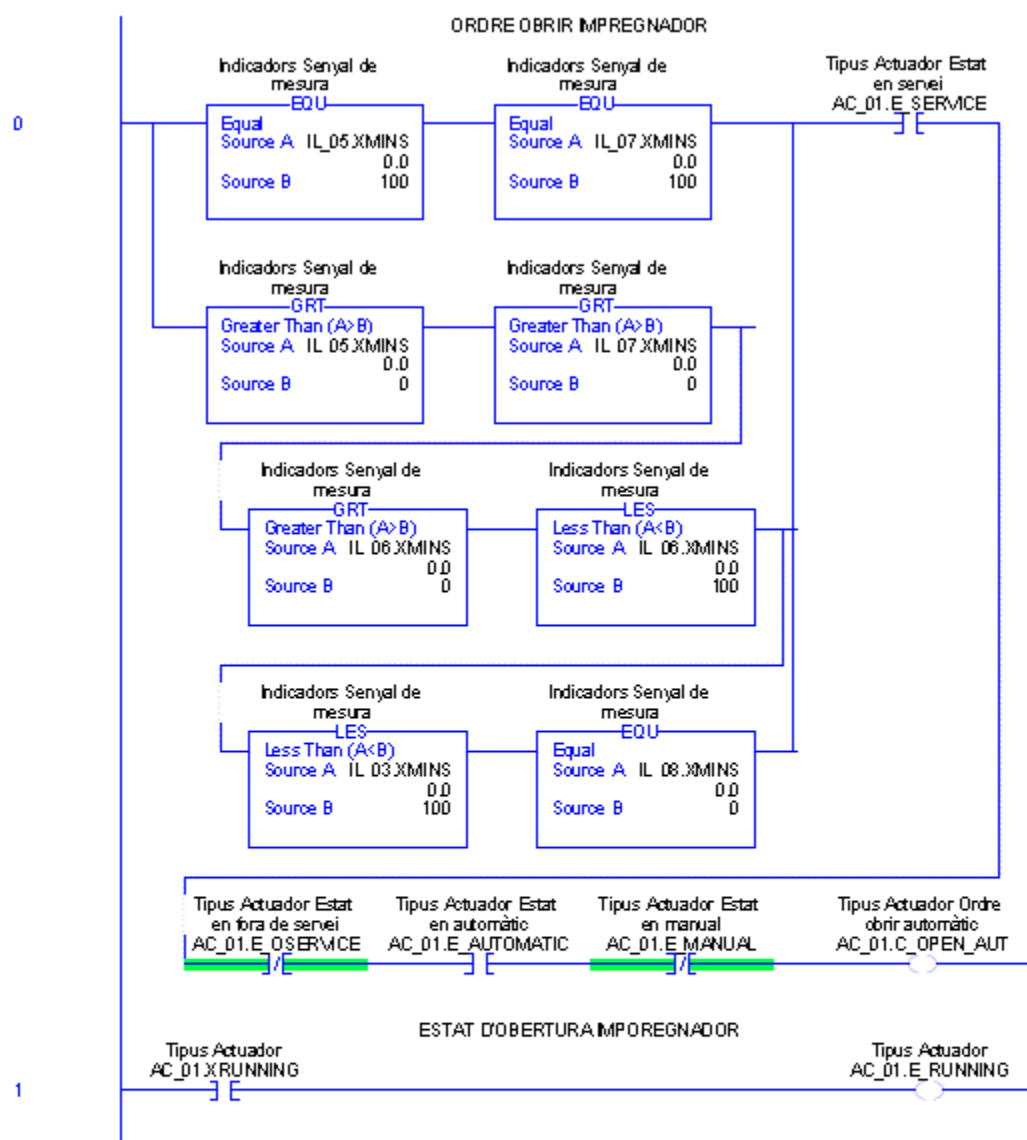
figbo:MainTask:Automatic

Total number of rungs in routine: 3

Page 185

01/01/2017 14:19:49

C:\Documents and Settings\Administrador\Escritorio\figbo.ACD



ESLogix 5000

## 20 Impregnació - Ladder Diagram

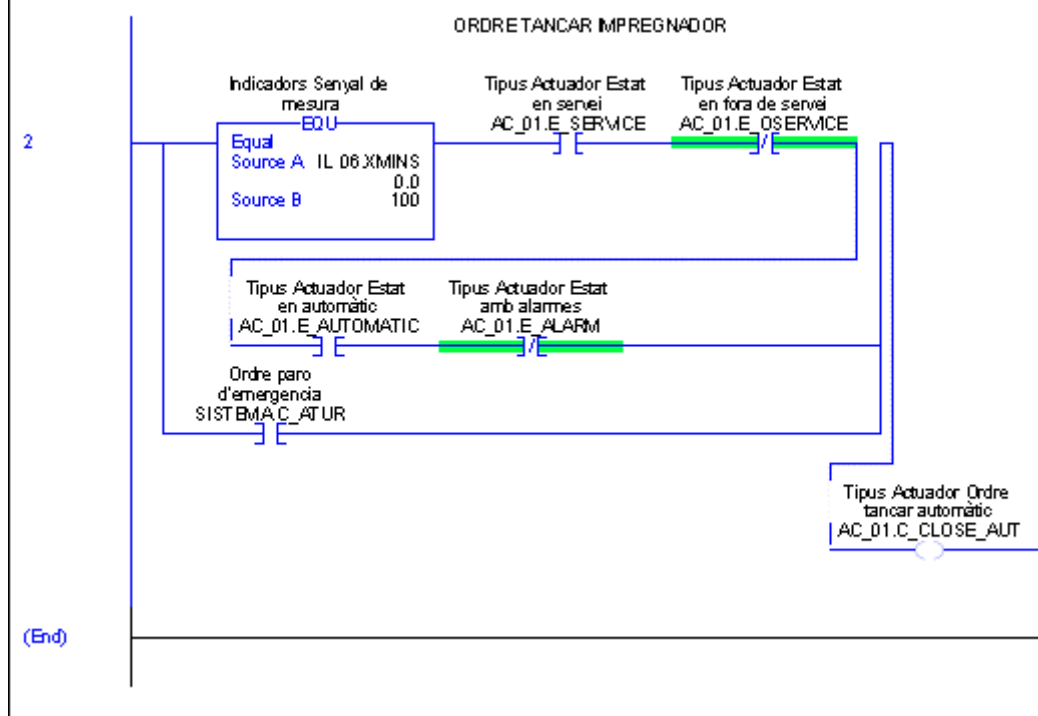
Figbo: MainTask Automatic

Total number of rungs in routine: 3

Page 186

01/01/2017 14:19:49

C:\Documents and Settings\Administrador\Escriptorio\Figbo\_ACD



## **ENTRADA AL DIGESTOR**

## 30 Entrada digestor - Ladder Diagram

Hgho: MainTask\_Automatic

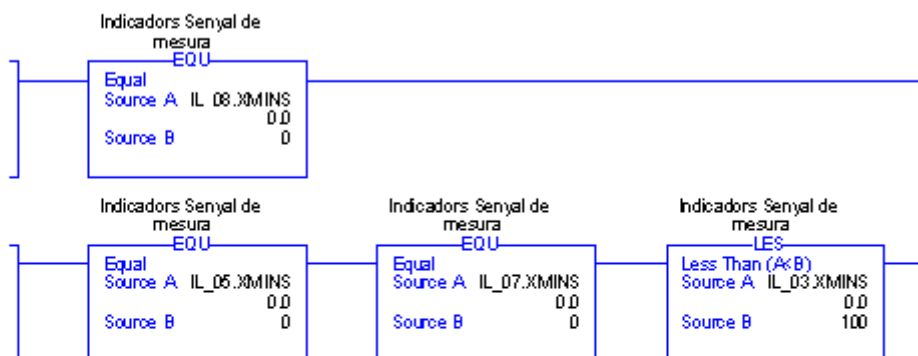
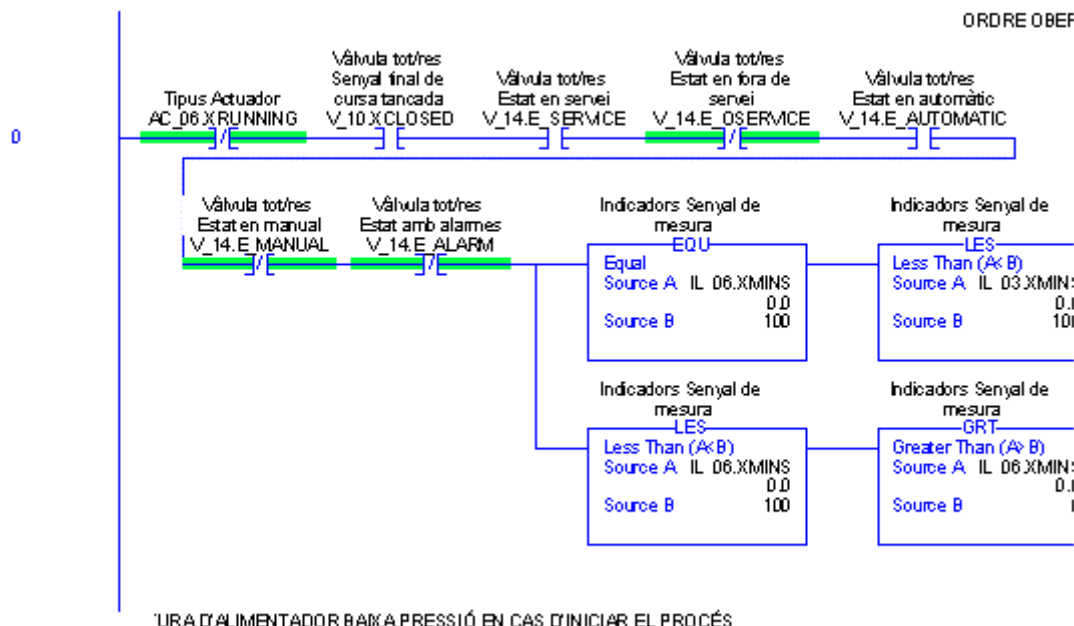
Total number of rungs in routine: 12

Page 187

01/01/2017 14:19:49

C:\Documents and Settings\Administrador\Escriptorio\Hgho\_A.CD

ORDRE OBEF



RSLogix 5000

su\_morana\_ogestor - Ladder Diagram

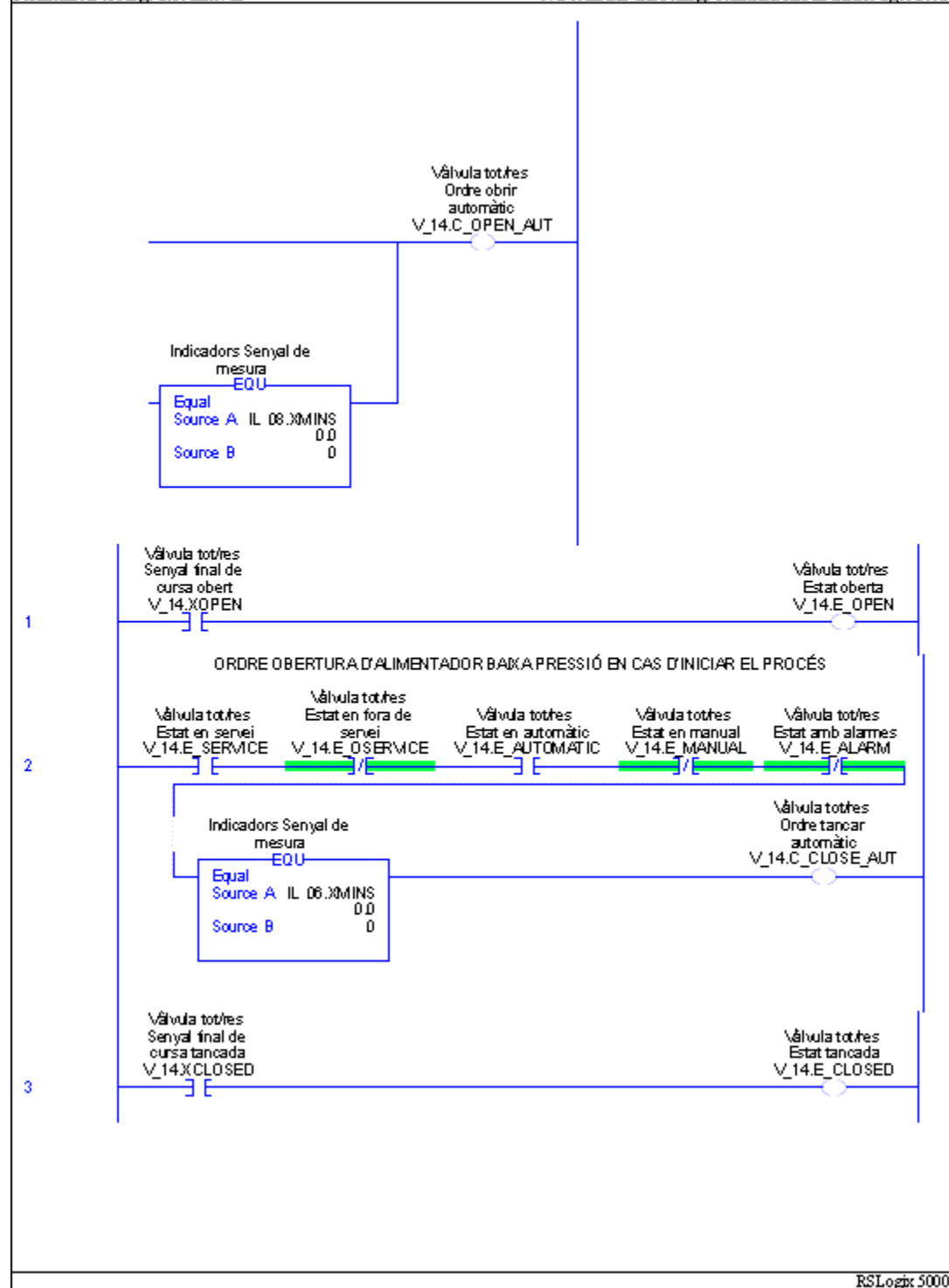
Page 133

Figbo:MainTask:Automatic

01/01/2017 14:19:30

Total number of rungs in routine: 12

C:\Documents and Settings\Administrador\Escritorio\Figbo.ACD



## 30 Entrada digestor - Ladder Diagram

figbo:MainTask:Automatic

Total number of rungs in routine: 12

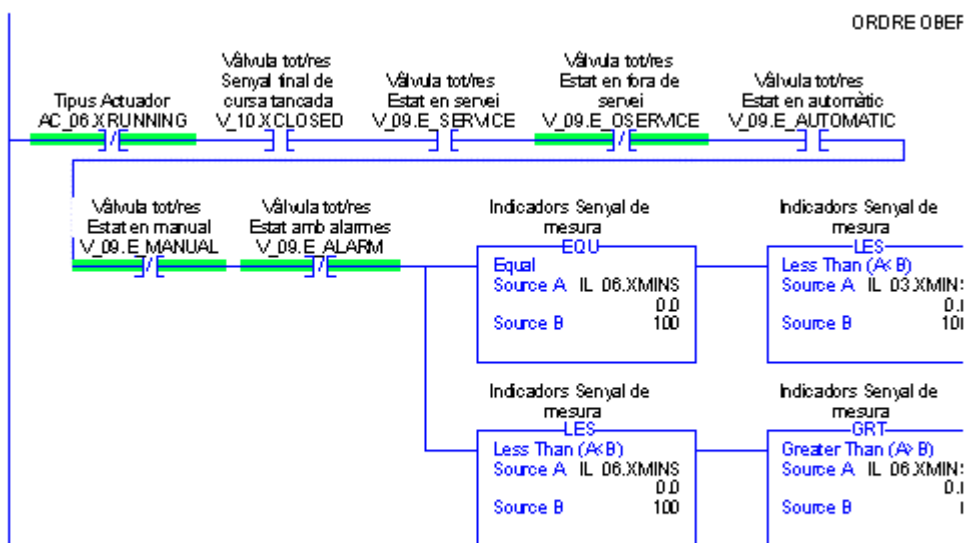
Page 189

01/01/2017 14:19:30

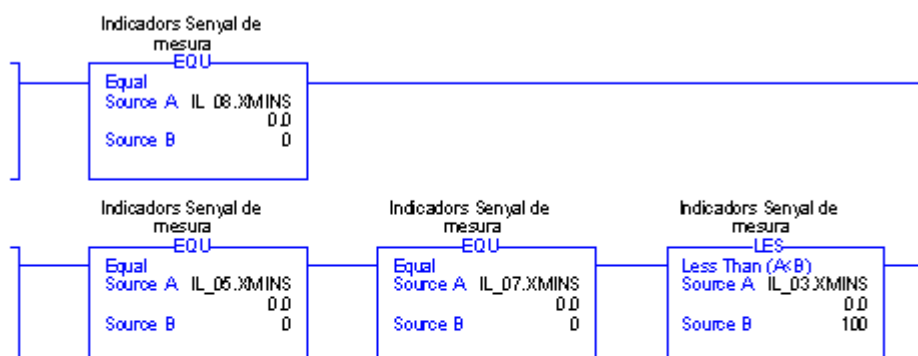
C:\Documents and Settings\Administrador\Escritori\figbo.ACD

ORDRE OBEF

4



URA D'ALIMENTADOR BAKA PRESSIÓ EN CAS D'INICIAR EL PROCÉS



RSLogix 5000

## 30 Entrada digestor - Ladder Diagram

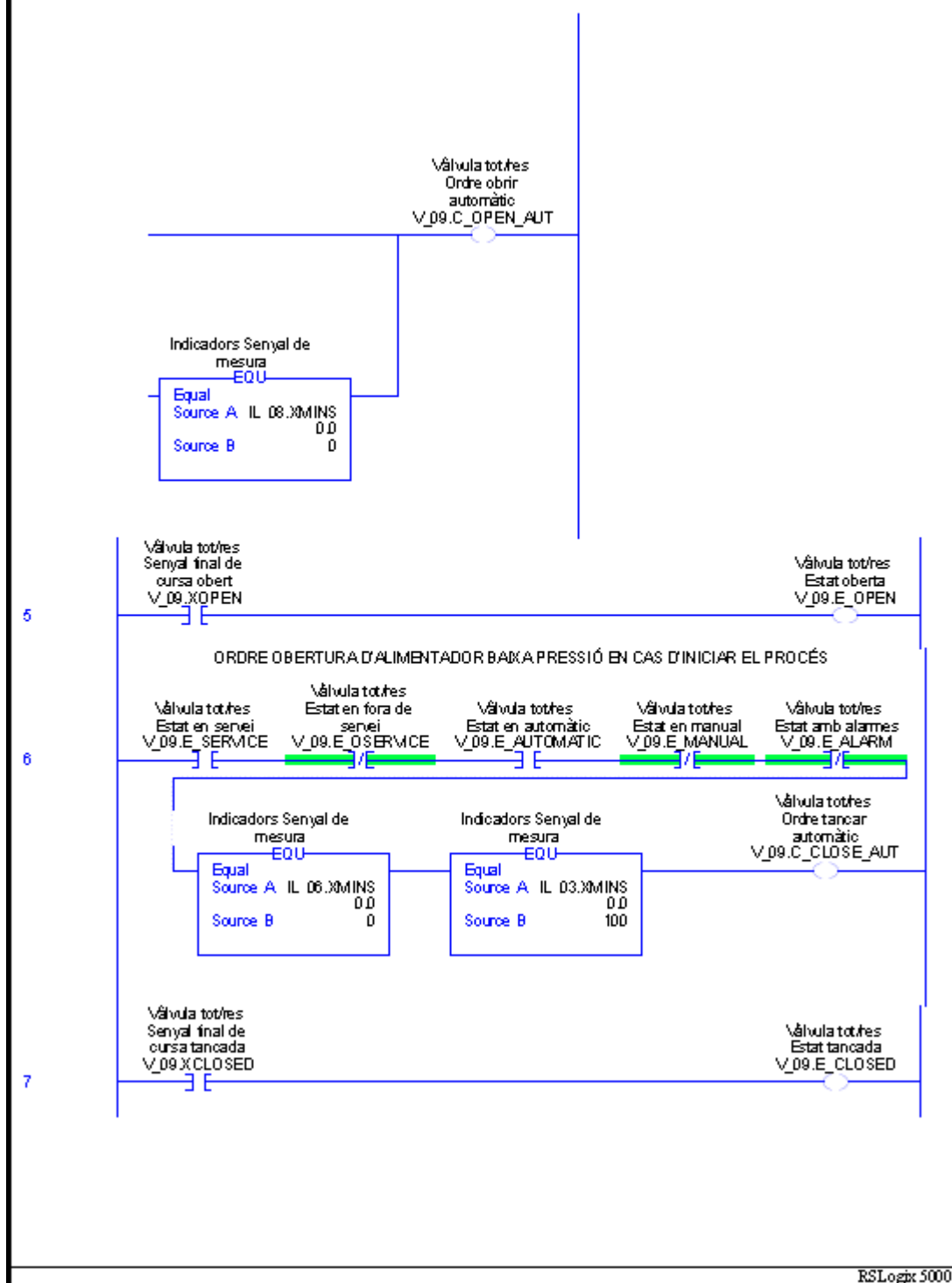
Page 190

Figbo: MainTask: Automatic

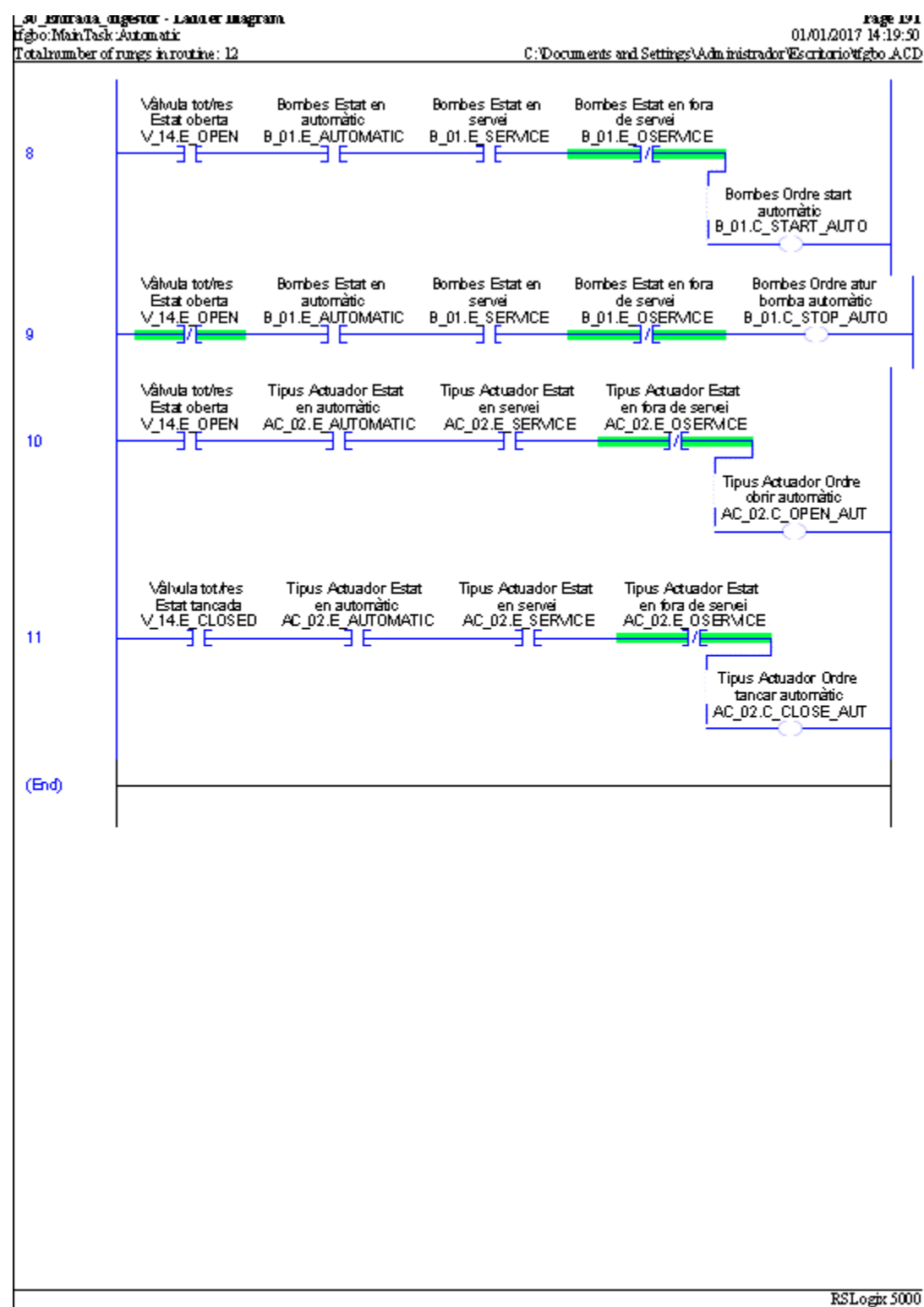
01/01/2017 14:19:50

Total number of rungs in routine: 12

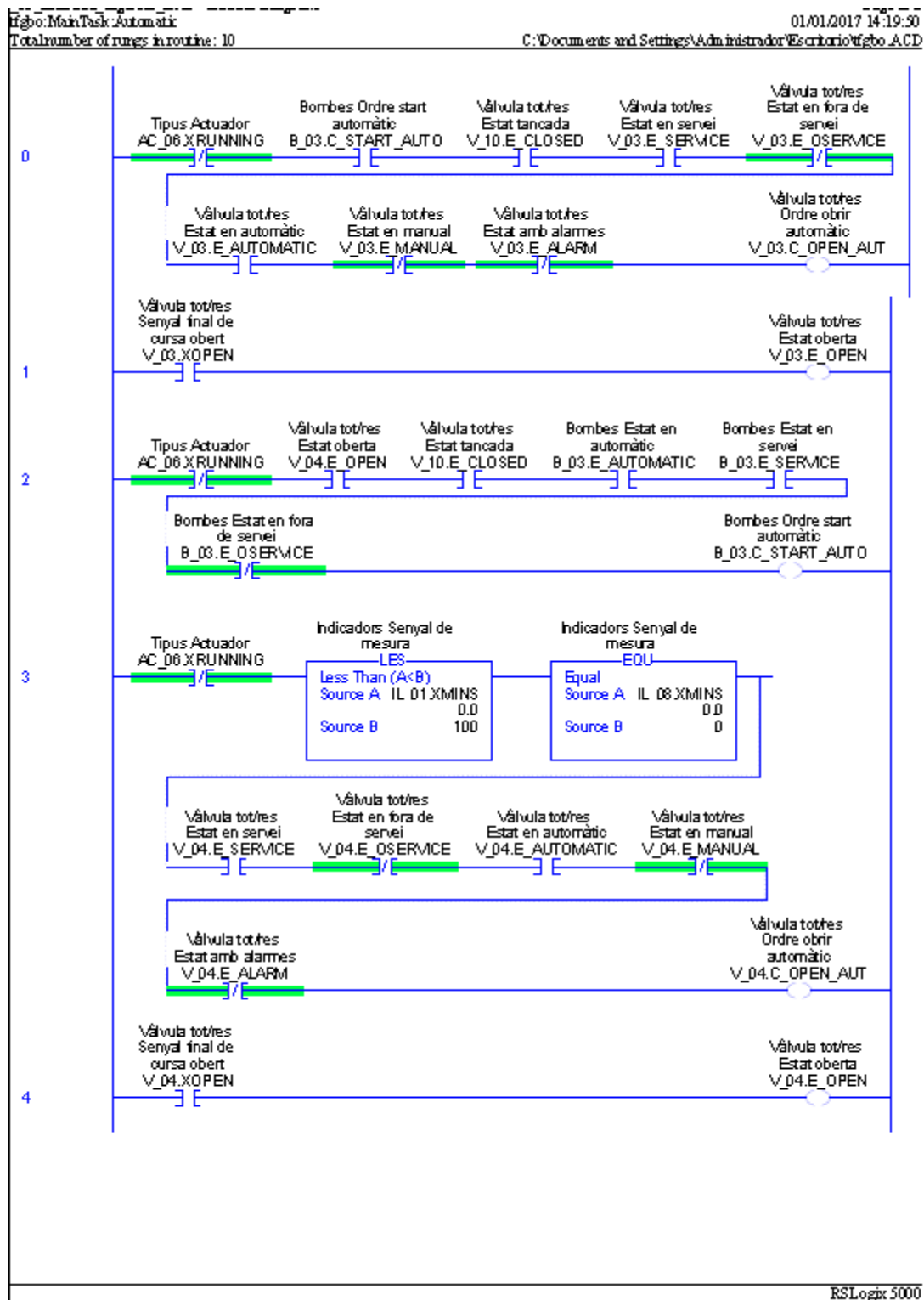
C:\Documents and Settings\Administrador\Escritorio\Figbo.ACD

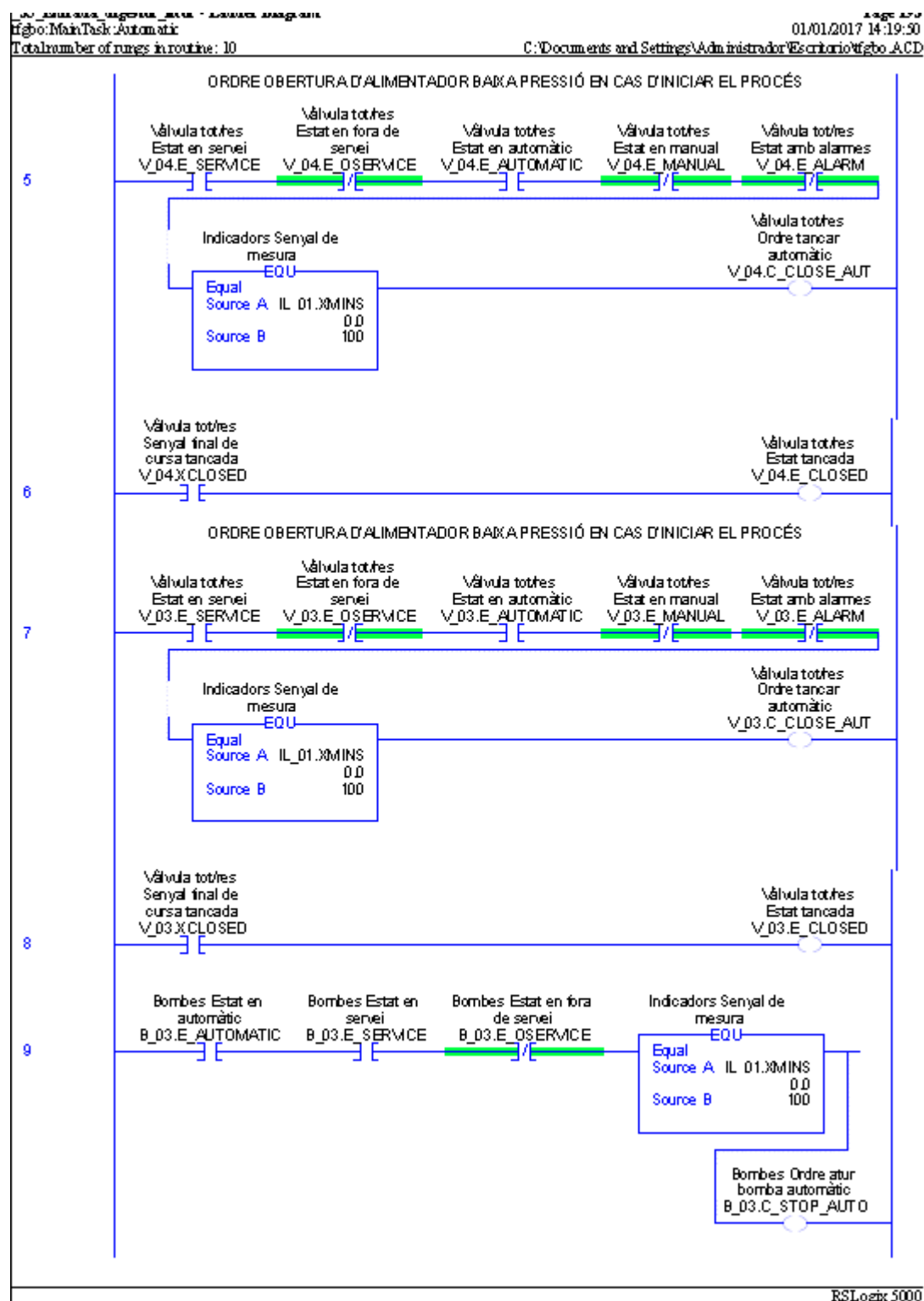






## **ENTRADA DIGESTOR LICOR**



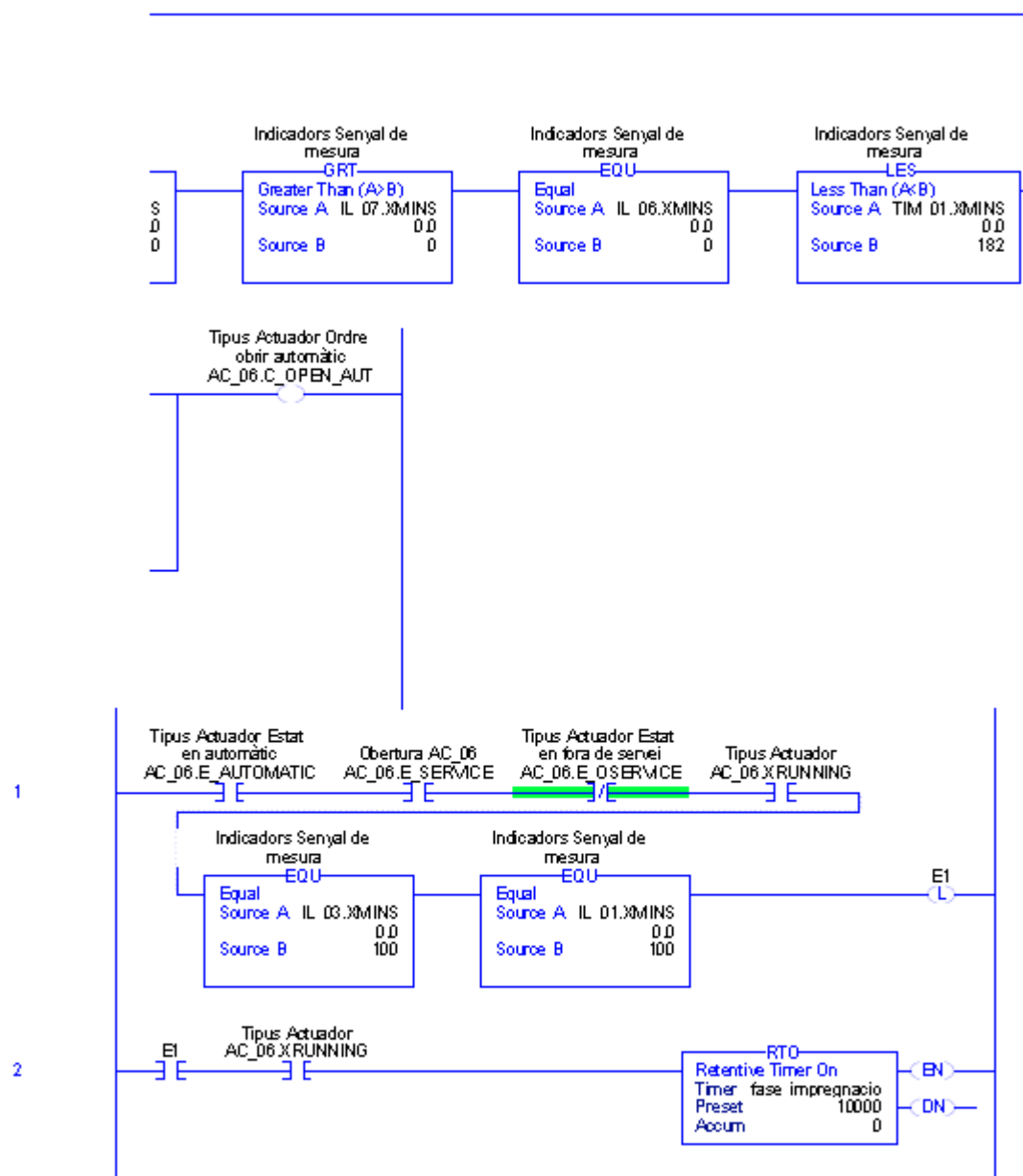


## **DIGESTOR**



no s'ha generat el diagrama de funcions  
 gbo:MainTask:Automatic  
 total number of rungs in routine: 27

Page 170  
 01/01/2017 14:19:51  
 C:\Documents and Settings\Administrador\Escriptori\figbo\_ACD



RSLogix 5000

## 40 Digestor - Ladder Diagram

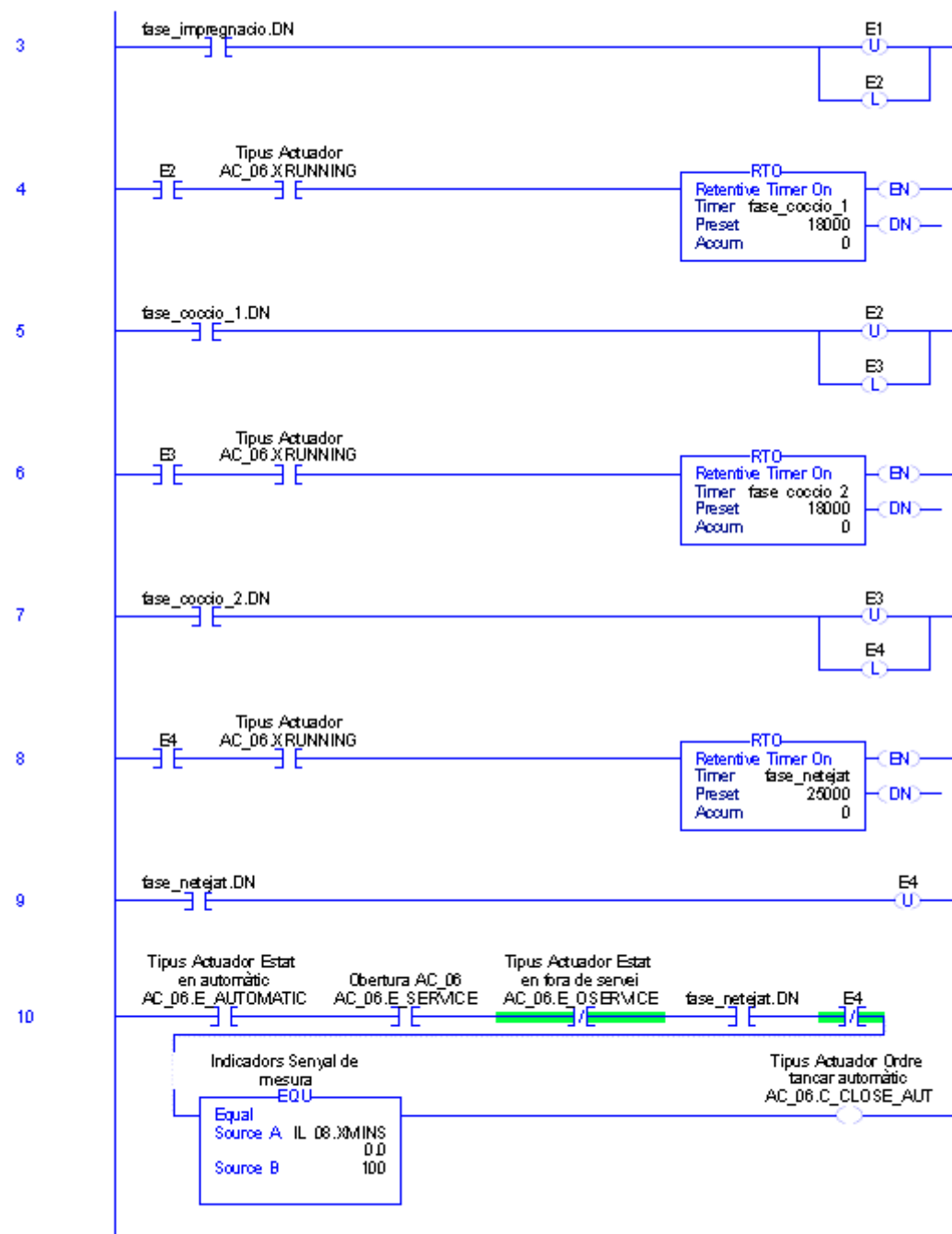
fibo:MainTask:Automatic

Total number of rungs in routine: 27

Page 197

01/01/2017 14:19:51

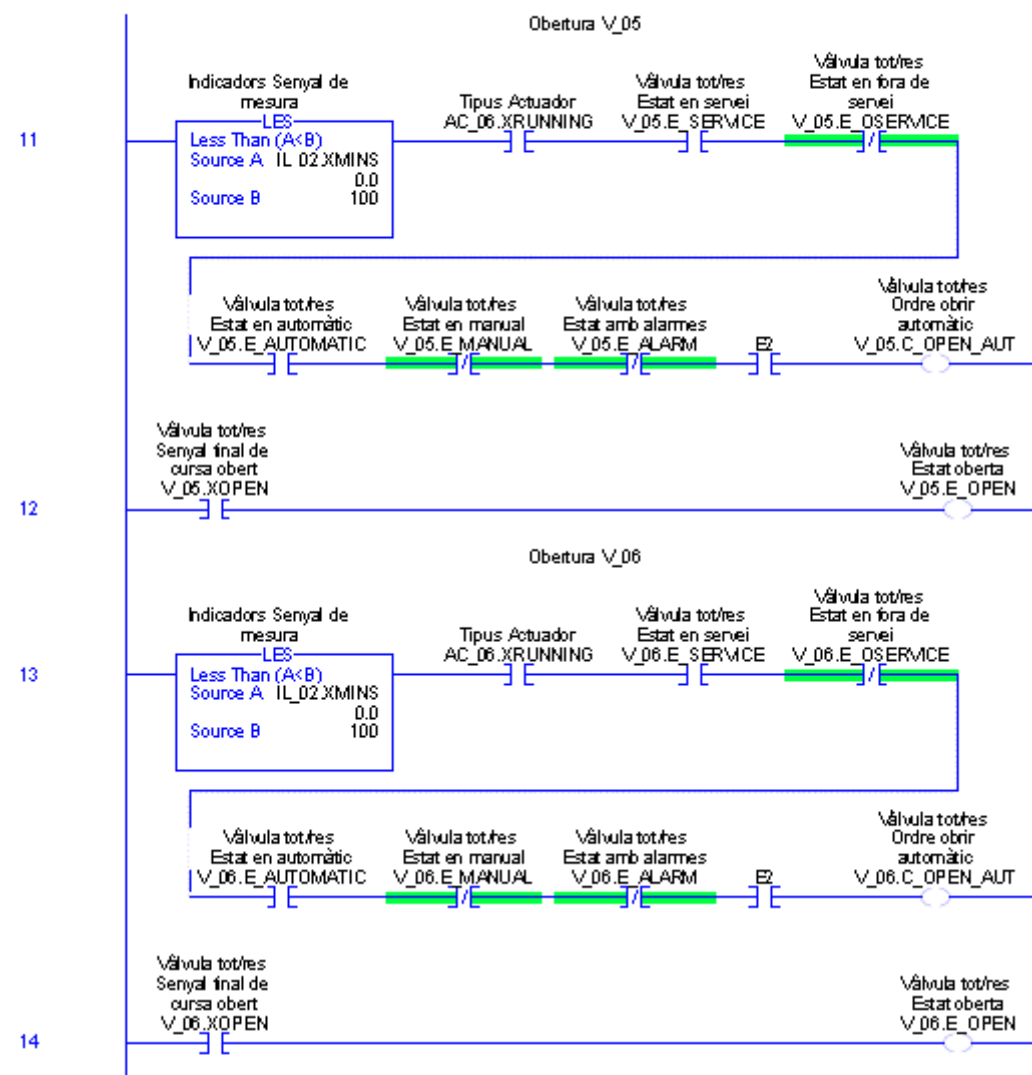
C:\Documents and Settings\Administrador\Escriptorio\ifibo\_ACI



RSLogix 5000



01/01/2017 14:19:51  
 C:\Documents and Settings\Administrador\Escriptori\figbo.ACD  
 @bo:MainTask:Automatic  
 total number of rungs in routine: 27

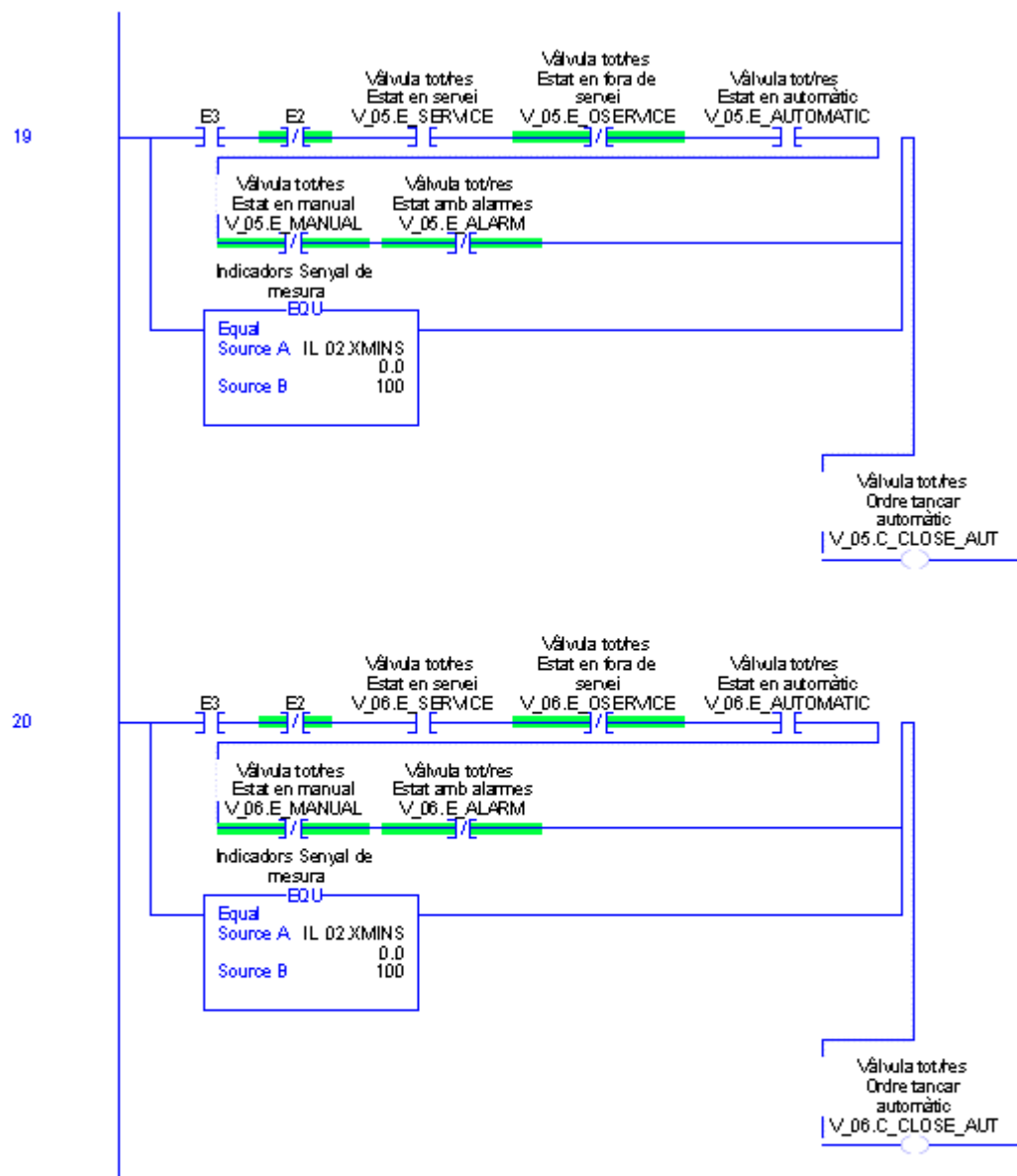


RSLogix 5000

40 Digestor - Ladder Diagram  
 fgo:MainTask:Automatic  
 Total number of rungs in routine: 27

Page 200  
 01/01/2017 14:19:51

C:\Documents and Settings\Administrador\Escriptorio\fgbo\_ACD



RSLogix 5000

## 40 Digestor - Ladder Diagram

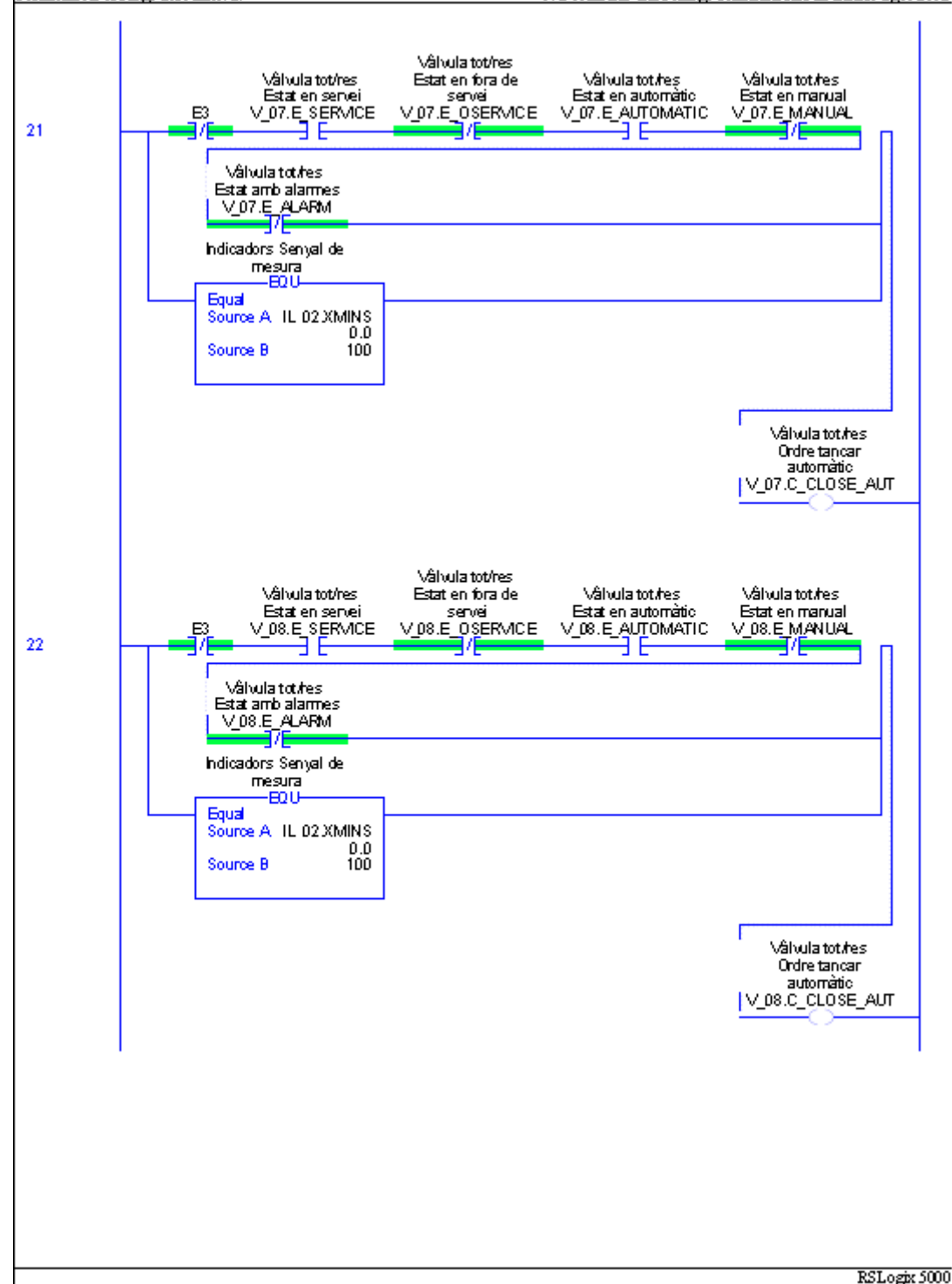
Fig00:MainTask\_Automatic

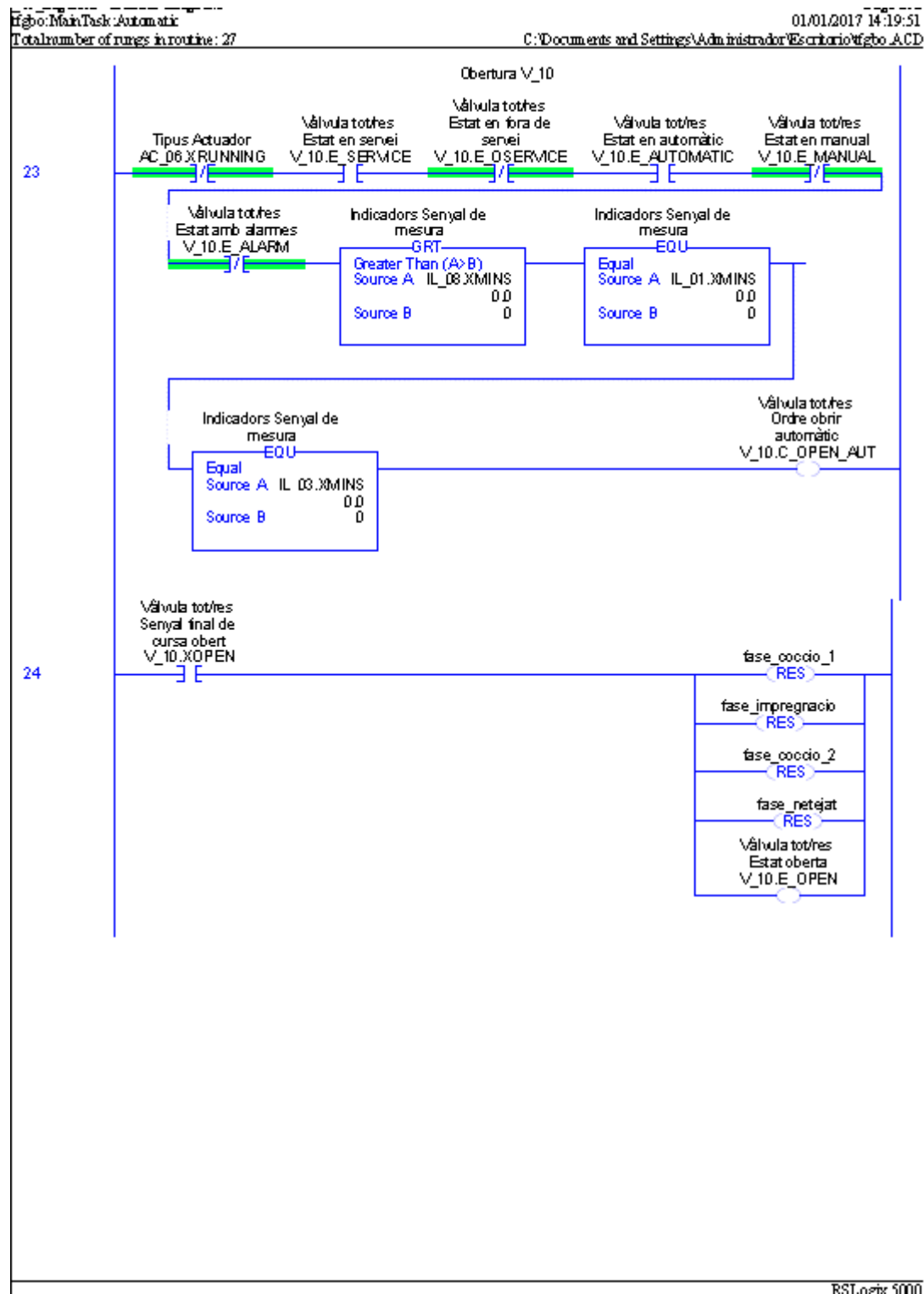
Total number of rungs in routine: 27

Page 201

01/01/2017 14:19:51

C:\Documents and Settings\Administrador\Escritorio\Tfeto\_A.CD





## 40 Digestor - Ladder Diagram

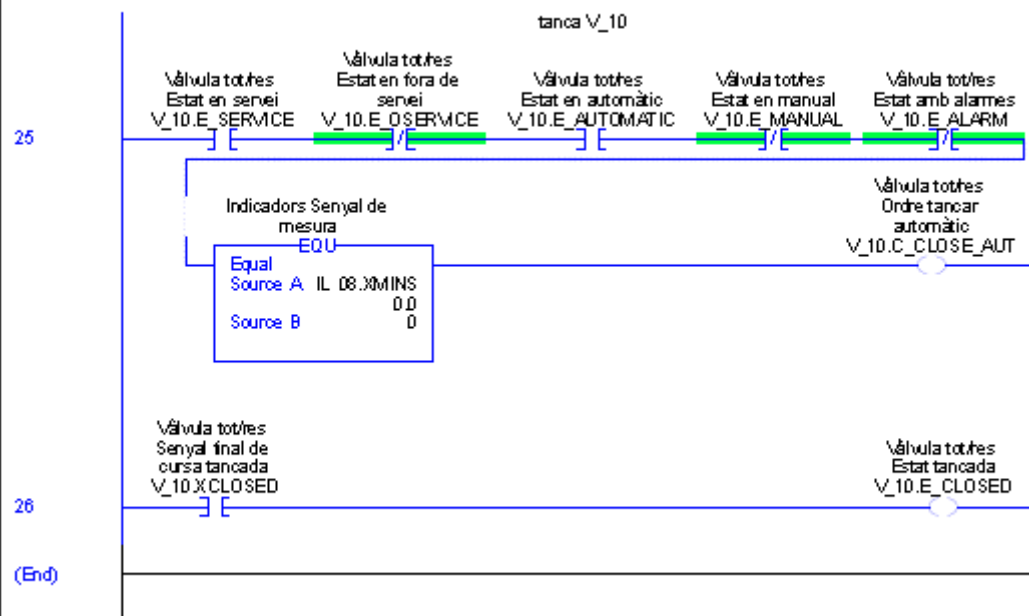
Figbo: MainTask:Automatic

Total number of rungs in routine: 27

Page 203

01/01/2017 14:19:51

C:\Documents and Settings\Administrador\Escriptorio\Figbo\_A.CD



## **SEPARADOR LICOR NEGRE**

## 45 Separador Negre - Ladder Diagram

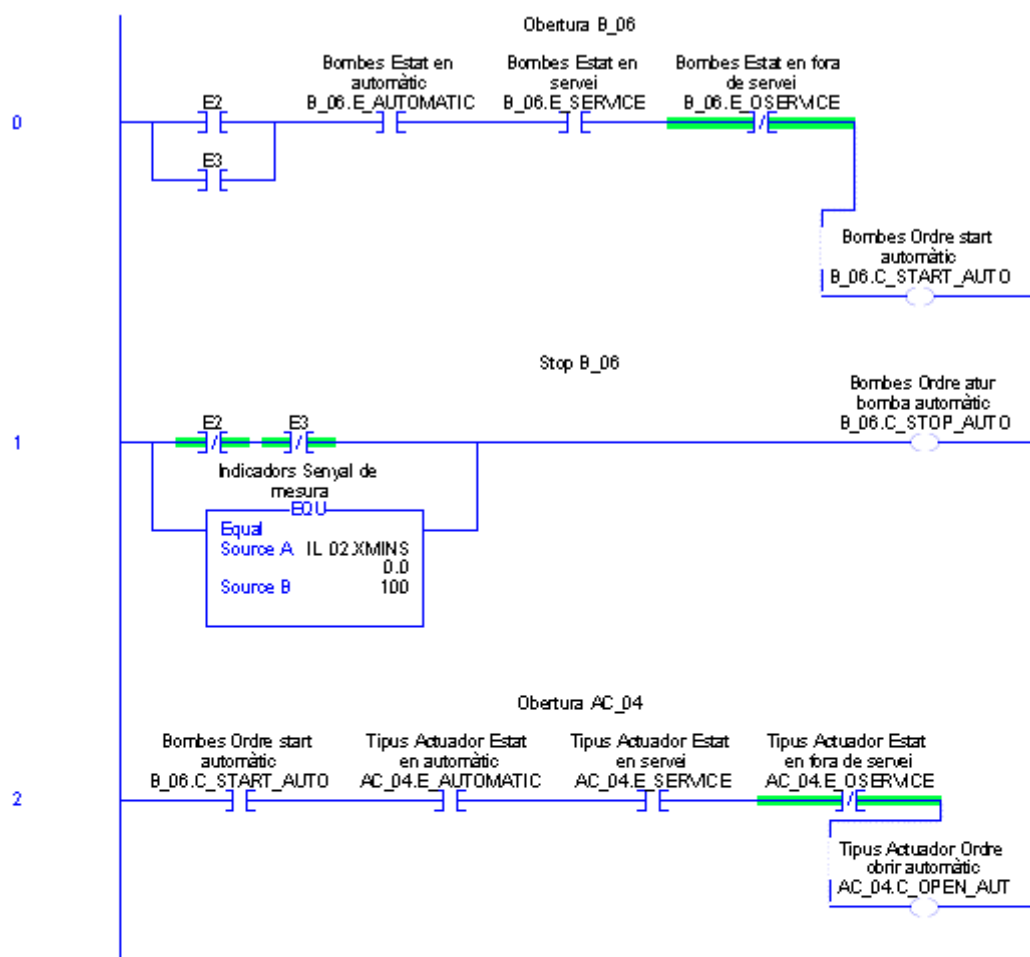
fig0:MainTaskAutomatic

Total number of rungs in routine: 4

Page 204

01/01/2017 14:19:51

C:\Documents and Settings\Administrador\Escriptori\figbo\_ACD



RSLogix 5000

Diagrama de funcions - Lander Diagram

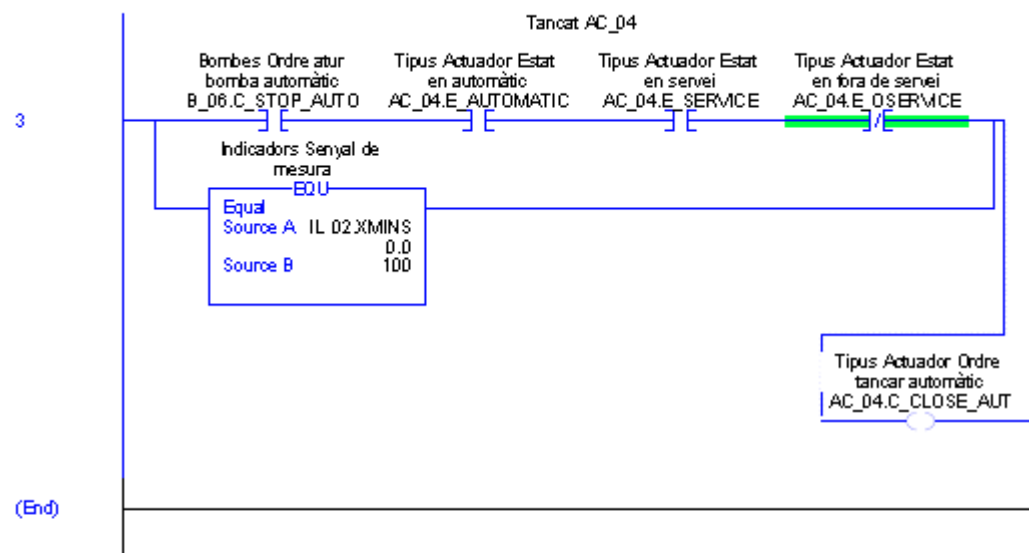
gbc:MainTask:Automatic

total number of rungs in routine: 4

Page 2

01/01/2017 14:19:

C:\Documents and Settings\Administrador\Escritorio\fgbo\_A\



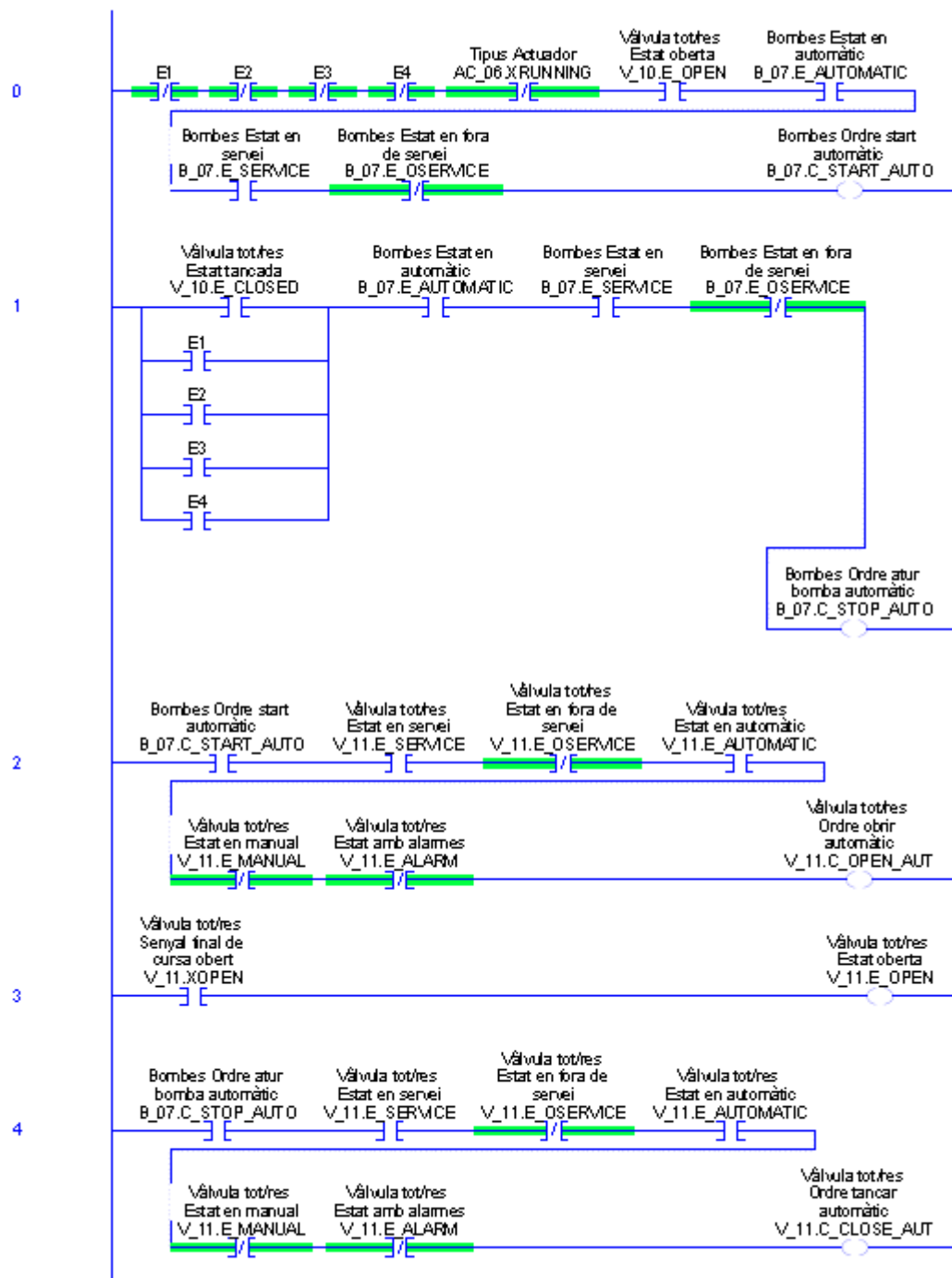


## **DIFUSOR**



RS Logix 5000 - Ladder Diagram  
 figbo.MainTask:Automatic  
 Total number of rungs in routine: 12

Page 2/6  
 01/01/2017 14:19:51  
 C:\Documents and Settings\Administrador\Escriptori\figbo\_ACI



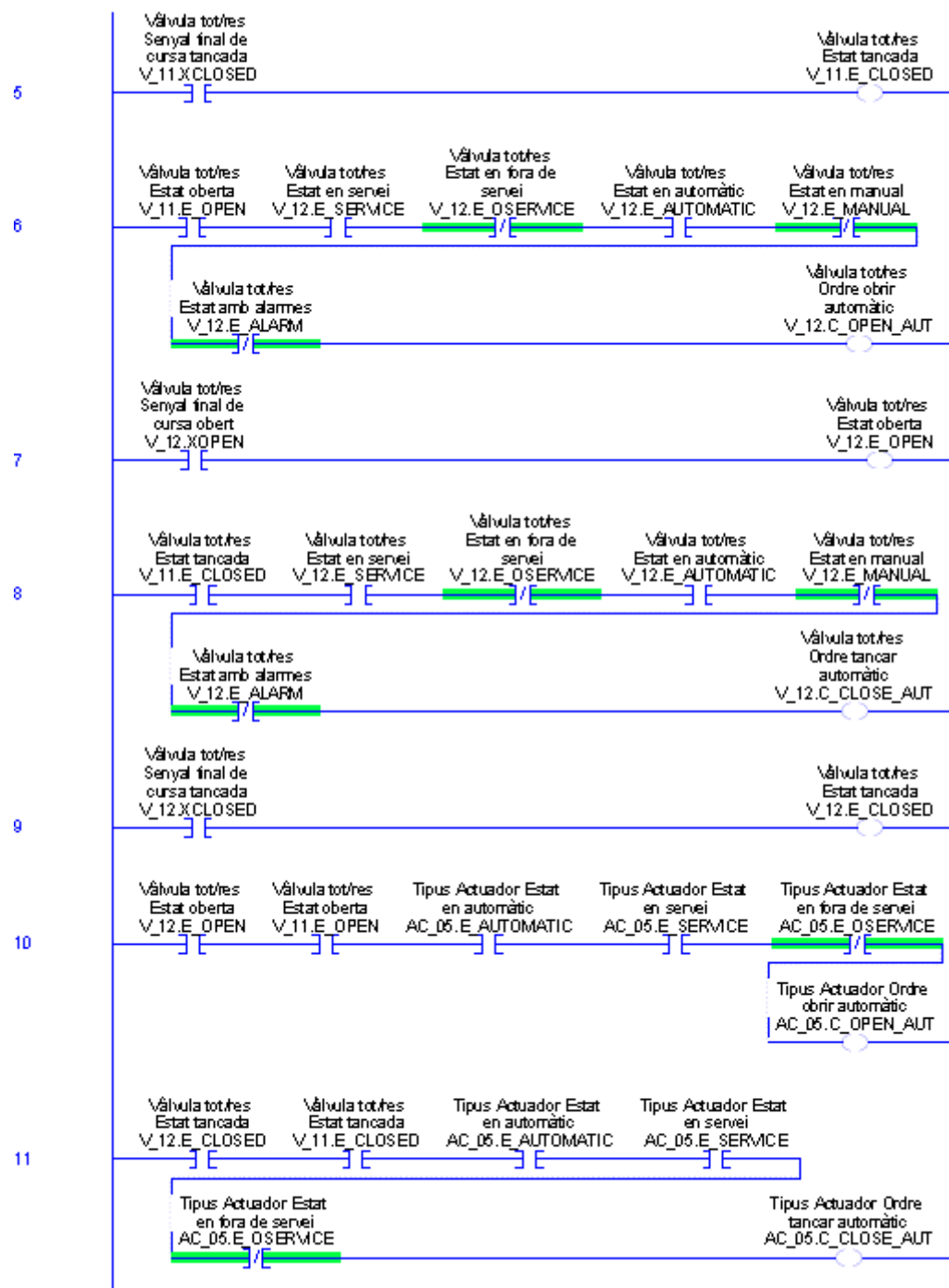
RSLogix 5000

W\_000000 - Ladder diagram  
 gbo:MainTask:Automatic  
 total number of rungs in routine: 12

Page 20

01/01/2017 14:19:52

C:\Documents and Settings\Administrador\Escriptori\gbo\_ACI



RSLogix 5000

**DESCÀRREGA**

00\_Descomrega - Ladder diagram

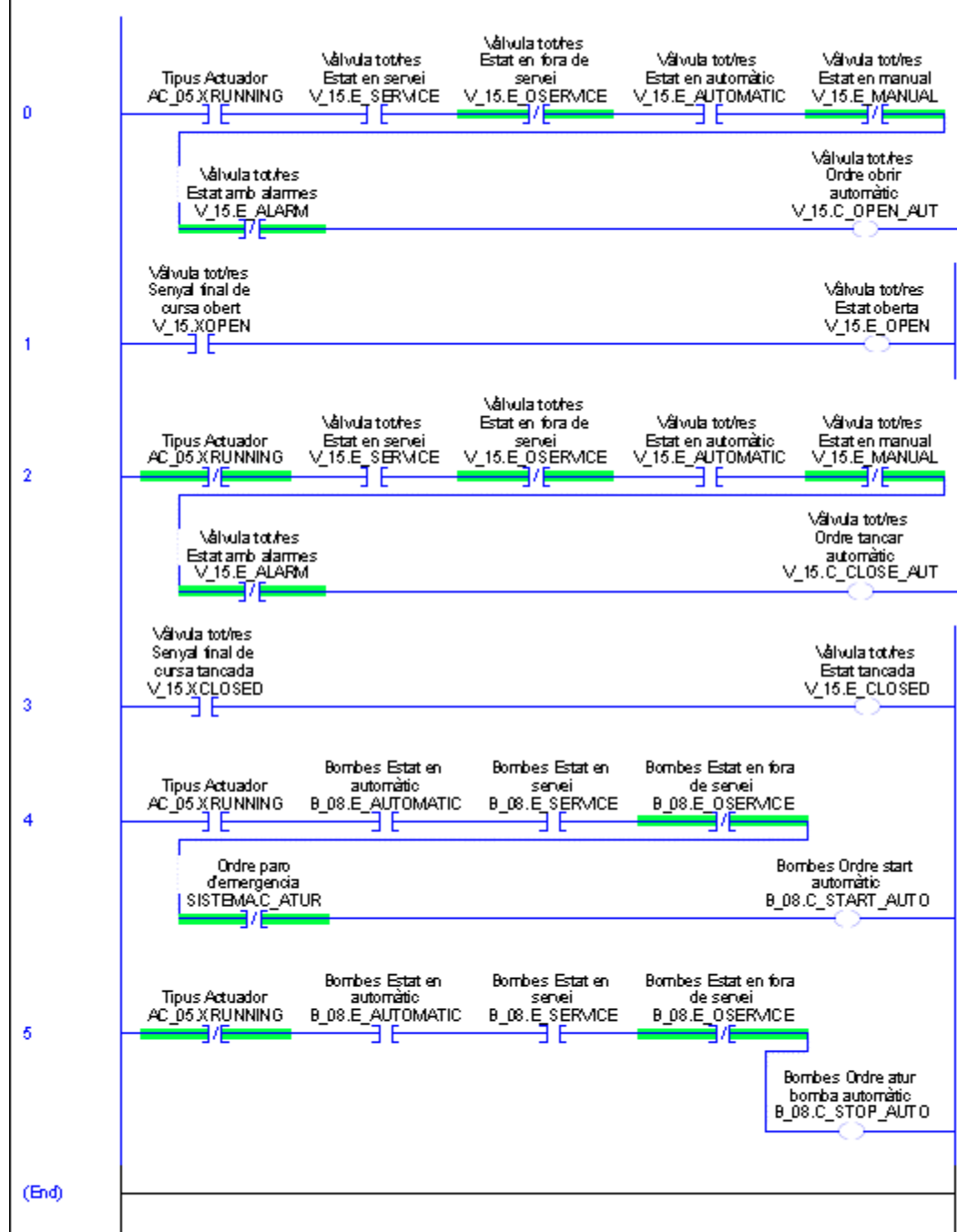
Figbo:MainTask:Automatic

Total number of rungs in routine: 6

Page 209

01/01/2017 14:19:32

C:\Documents and Settings\Administrador\Escriptorio\Figbo.ACD



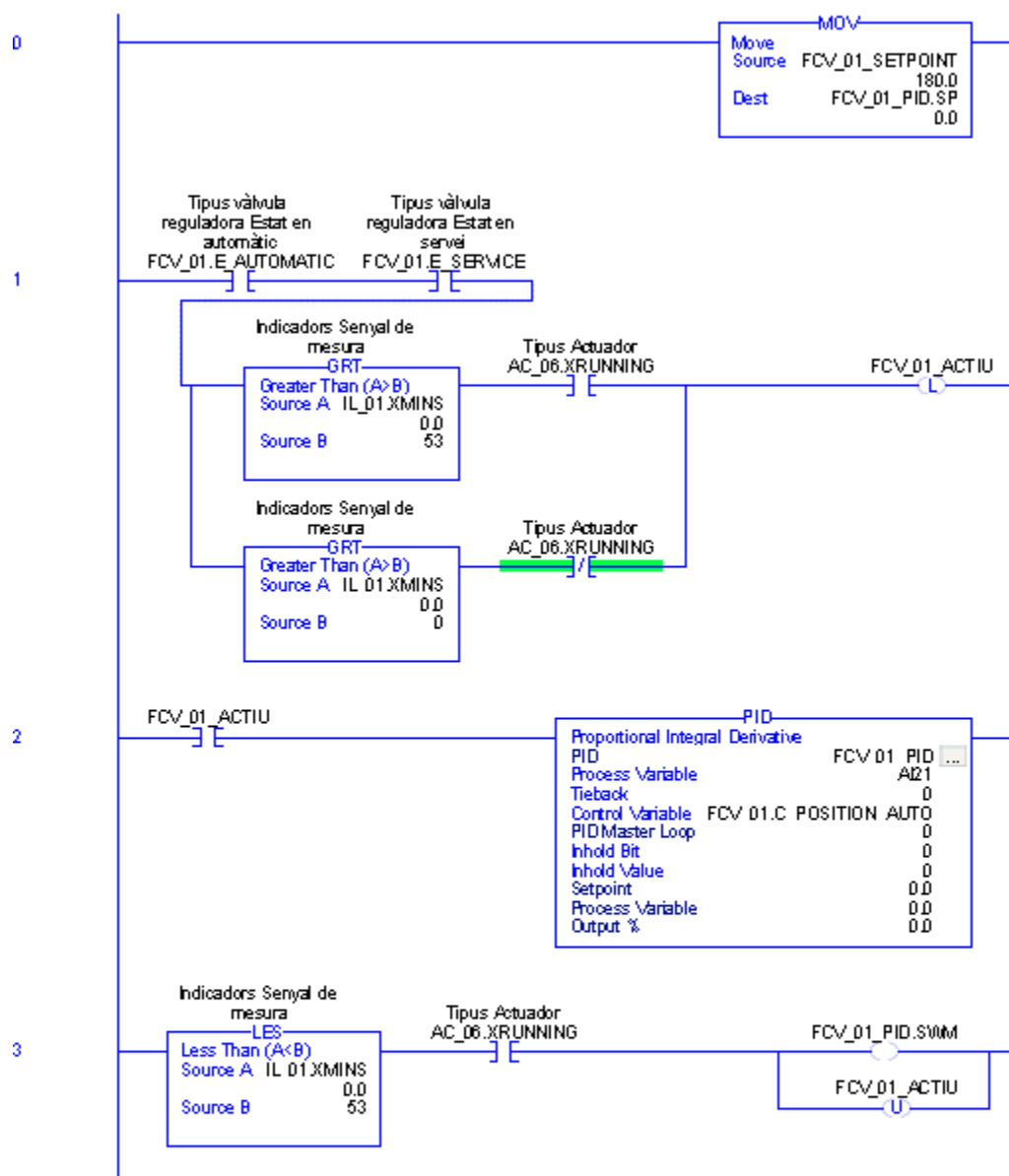
RSLogix 5000

## **PID 1**

17\_1\_1\_10 - Autòmat de control  
 gbo: MainTask Automatic  
 total number of rungs in routine: 7

Page 240  
 01/01/2017 14:19:52

C:\Documents and Settings\Administrador\Escritorio\figbo.ACD



RSLogix 5000



99\_1\_PID - Ladder Diagram

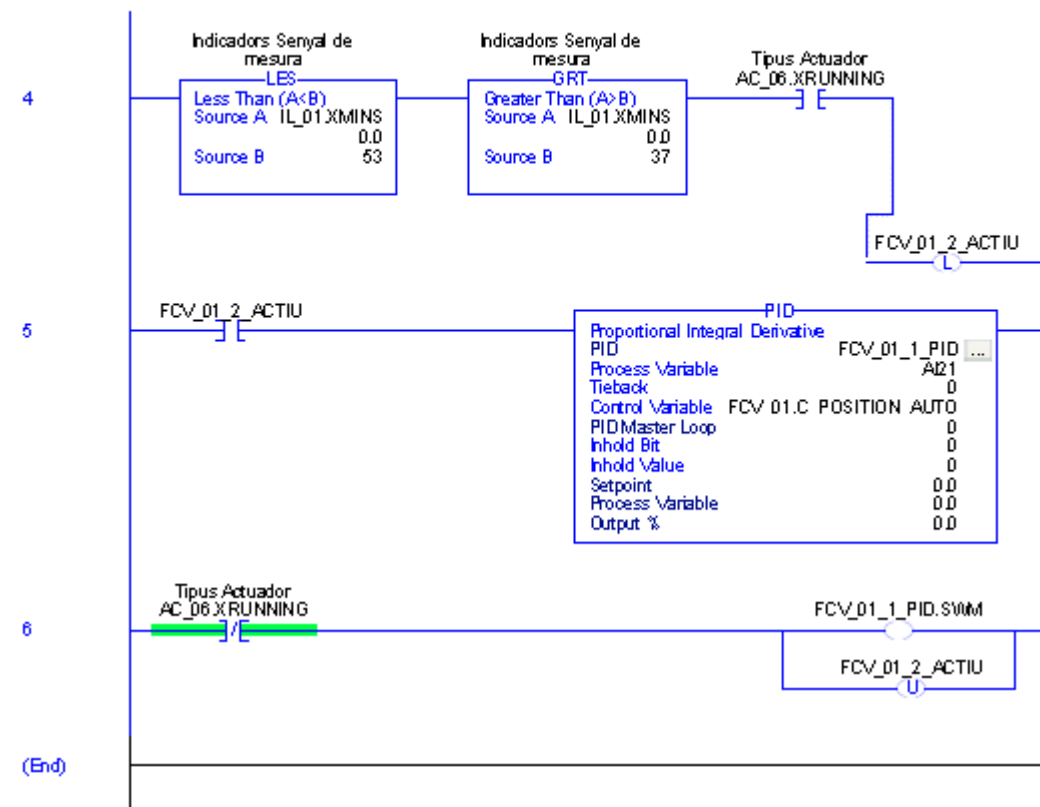
Page 2/11

tfgbo:MainTask:Automatic

01/01/2017 14:19:53

Total number of rungs in routine: 7

C:\Documents and Settings\Administrador\Escritorio\tfgbo\_ACD

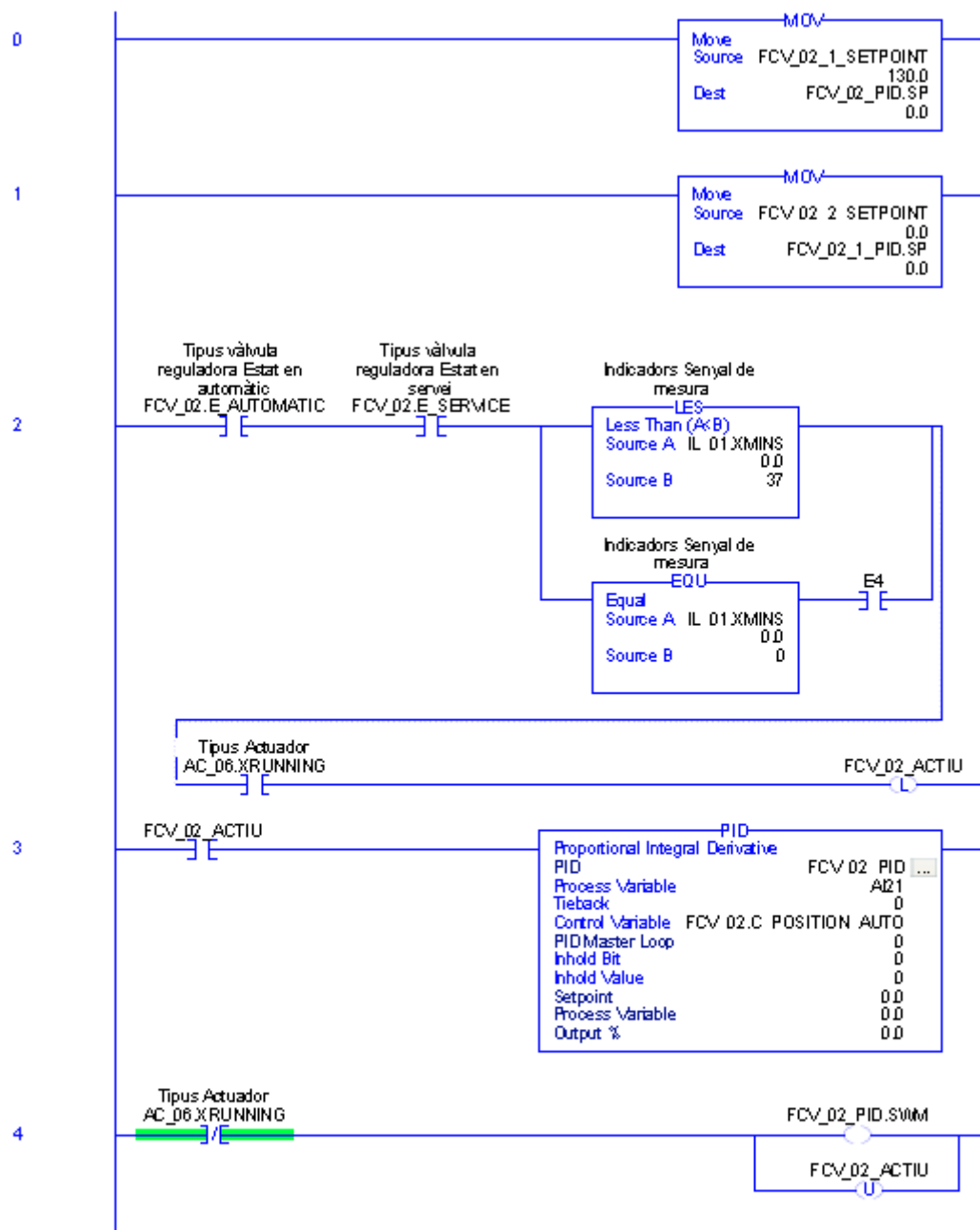


RSLogix 5000

## PID 2

99\_2\_PID - Ladder Diagram  
 fgb0:MainTask:Automatic  
 Total number of rungs in routine: 7

Page 21:  
 01/01/2017 14:19:52  
 C:\Documents and Settings\Administrador\Escritori\fgb0\_ACI



RSLogix 5000

99\_1\_FMV - Ladder Diagram

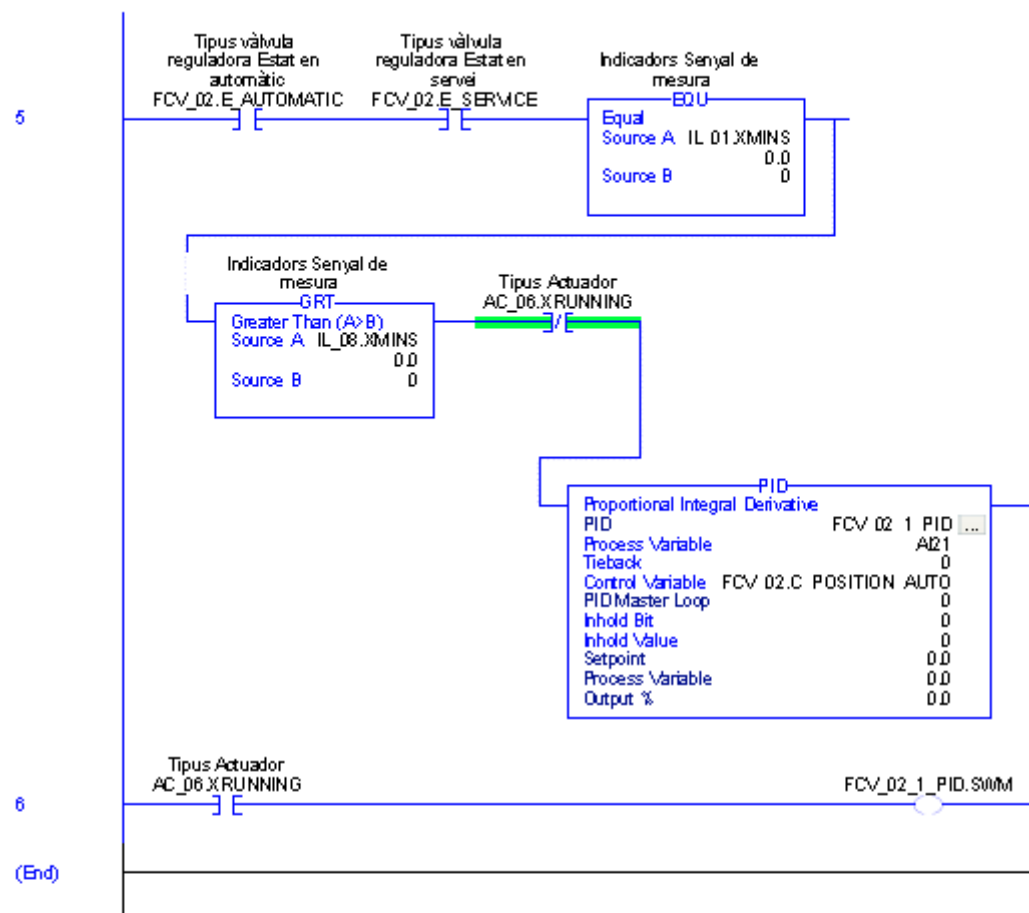
gbo:MainTask:Automatic

total number of rungs in routine: 7

Page 11

01/01/2017 14:19:5

C:\Documents and Settings\Administrador\Escritorio\figbo\_A.C



RSLogix 500

### *1.1.3. Simulació.*

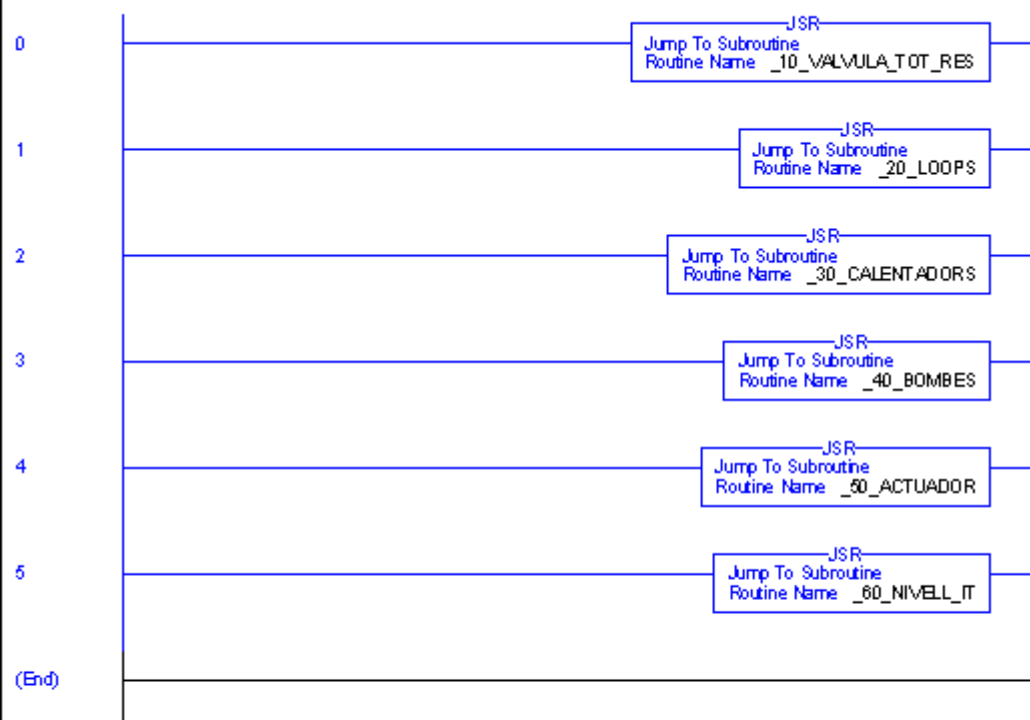
## **MAIN ROUTINE**

00\_nomenclature - Ladder Diagram  
 Figbo:PlantSimulation:Plant\_Simulation  
 Total number of rungs in routine: 6

Page 114

01/01/2017 14:19:53

C:\Documents and Settings\Administrador\Escritorio\Figbo\_A.CD



RSLogix 5000

## **VÀLVULA TOT/RES**

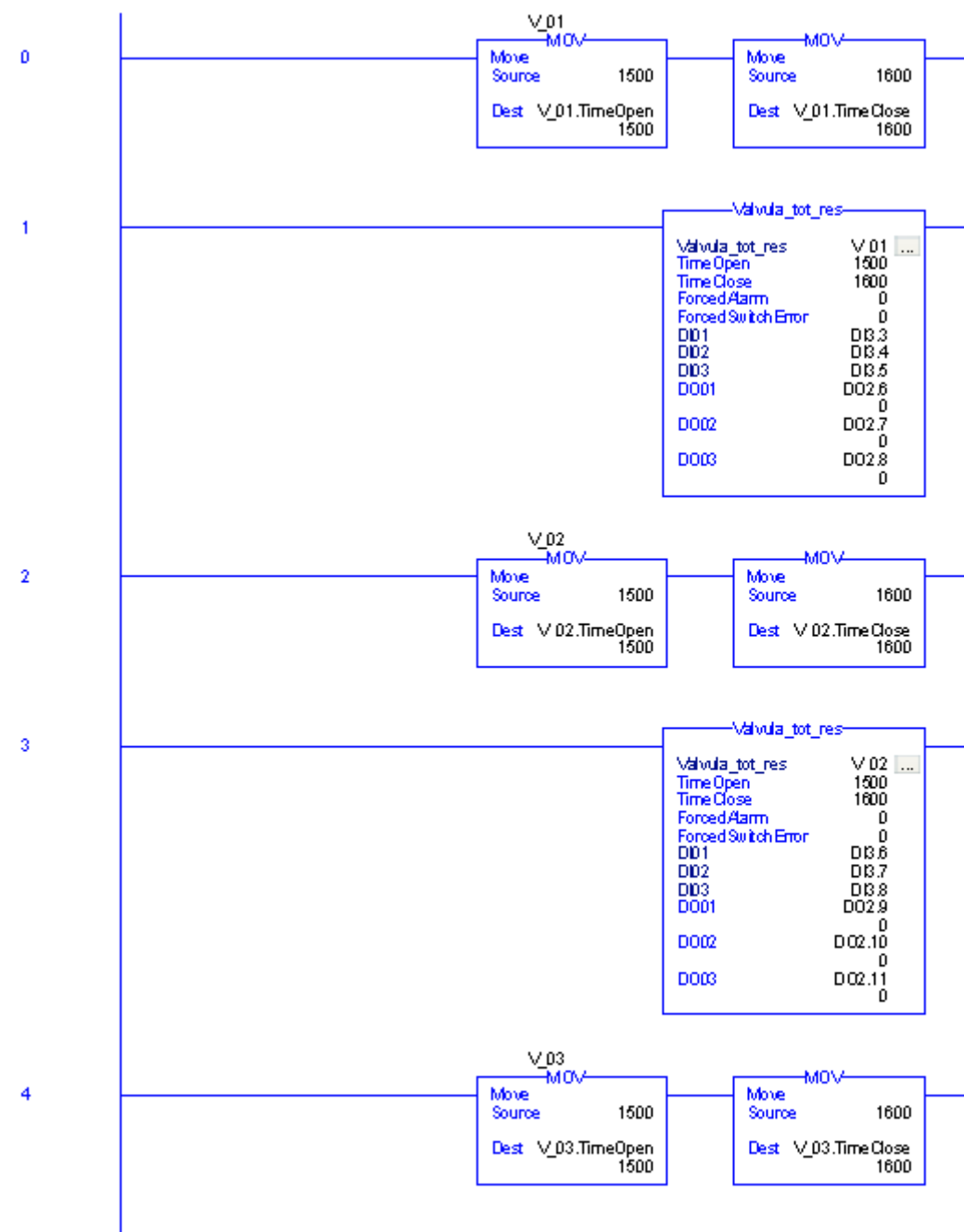




gbo:PlantSimulation:Plant\_Simulation  
 Total number of rungs in routine: 32

01/01/2017 14:20:00

C:\Documents and Settings\Administrador\Escritori\gbo\_ACI



RSLogix 5000

\_10\_VALVULA\_101\_RES - Ladder diagram

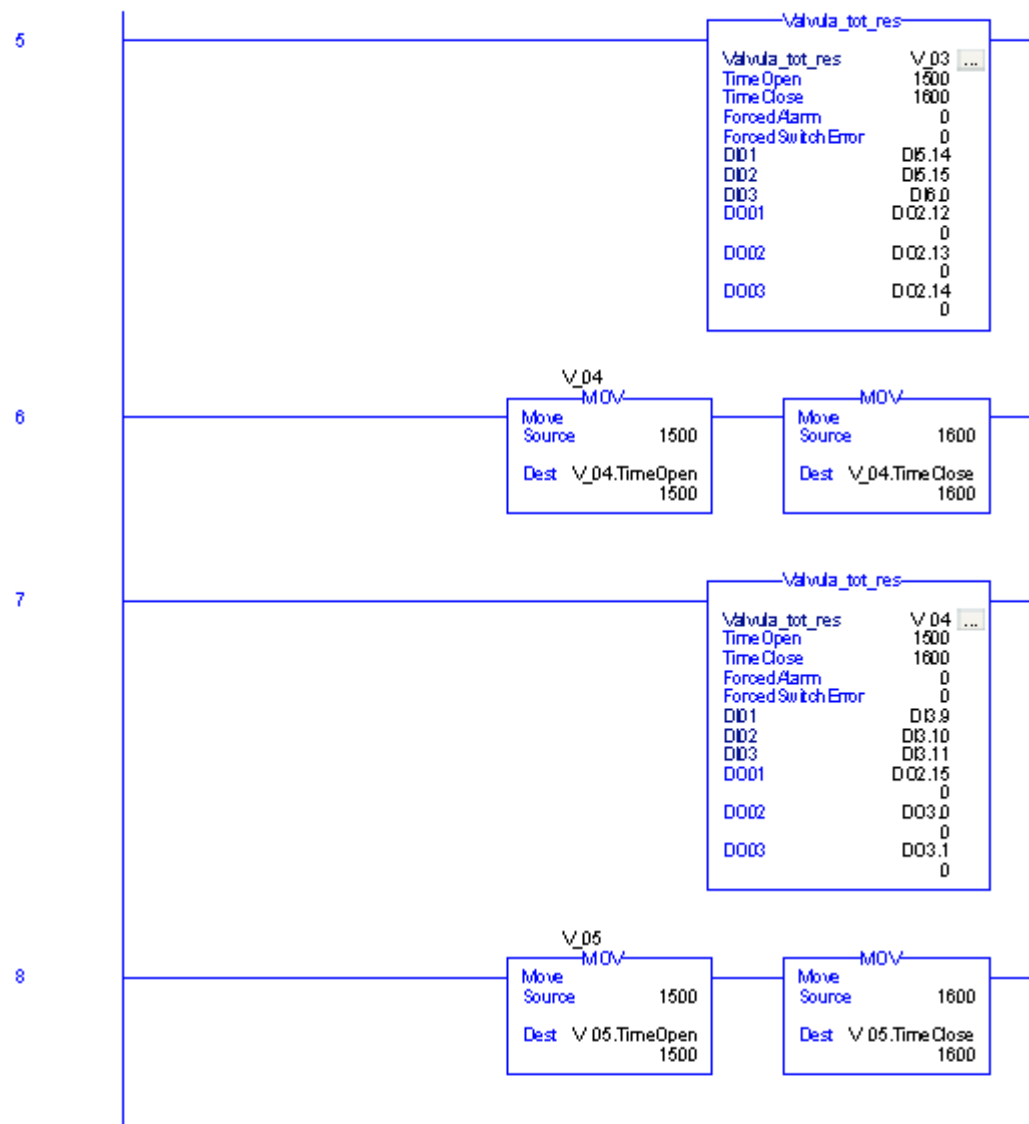
Page 210

figbo:PhatSimulation:Phat\_Simulation

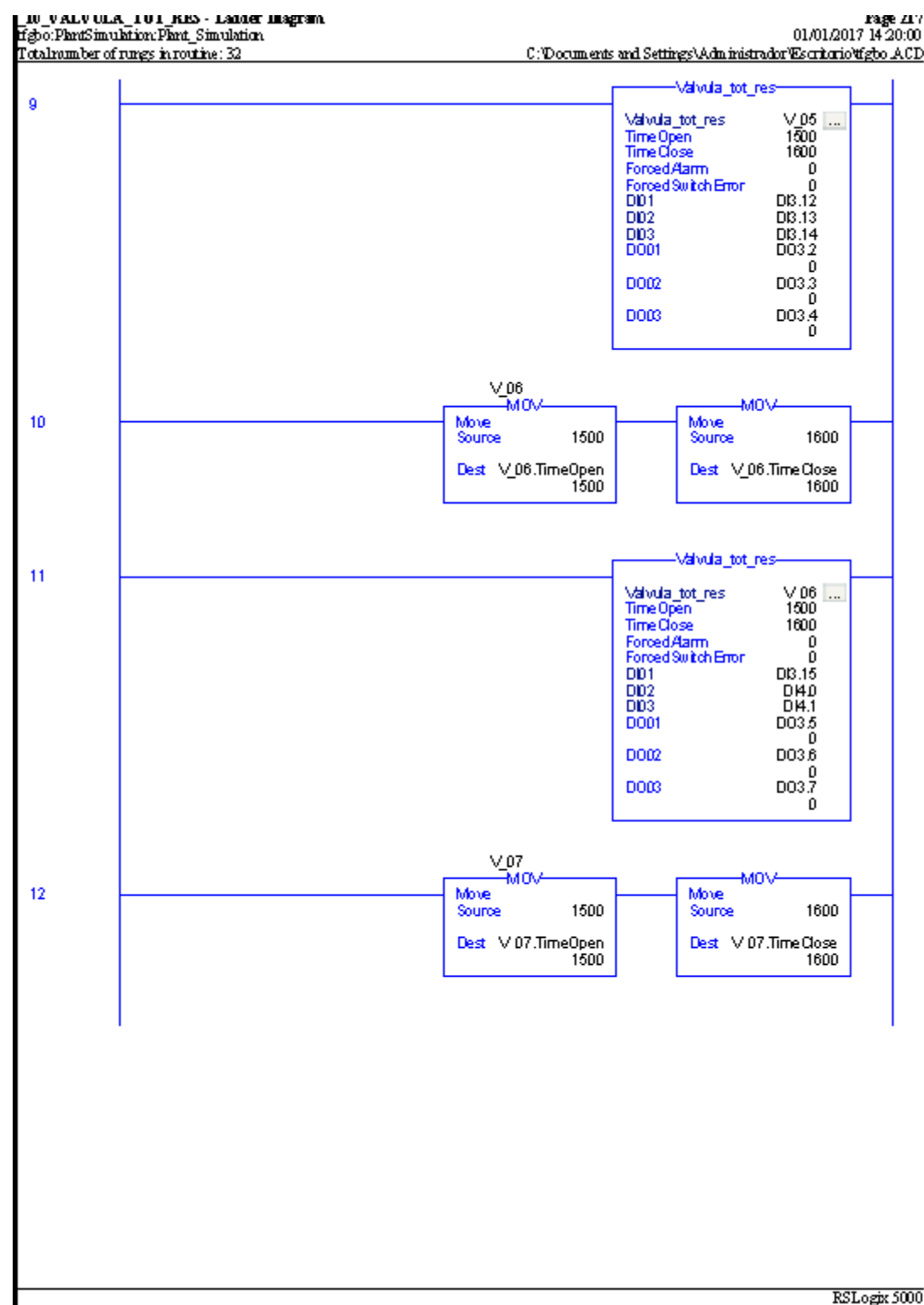
01/01/2017 14:20:00

Total number of rungs in routine: 32

C:\Documents and Settings\Administrador\Escritorio\figbo\_ACD



RSLogix 5000



## 10 VALVULA TOT RES - Ladder Diagram

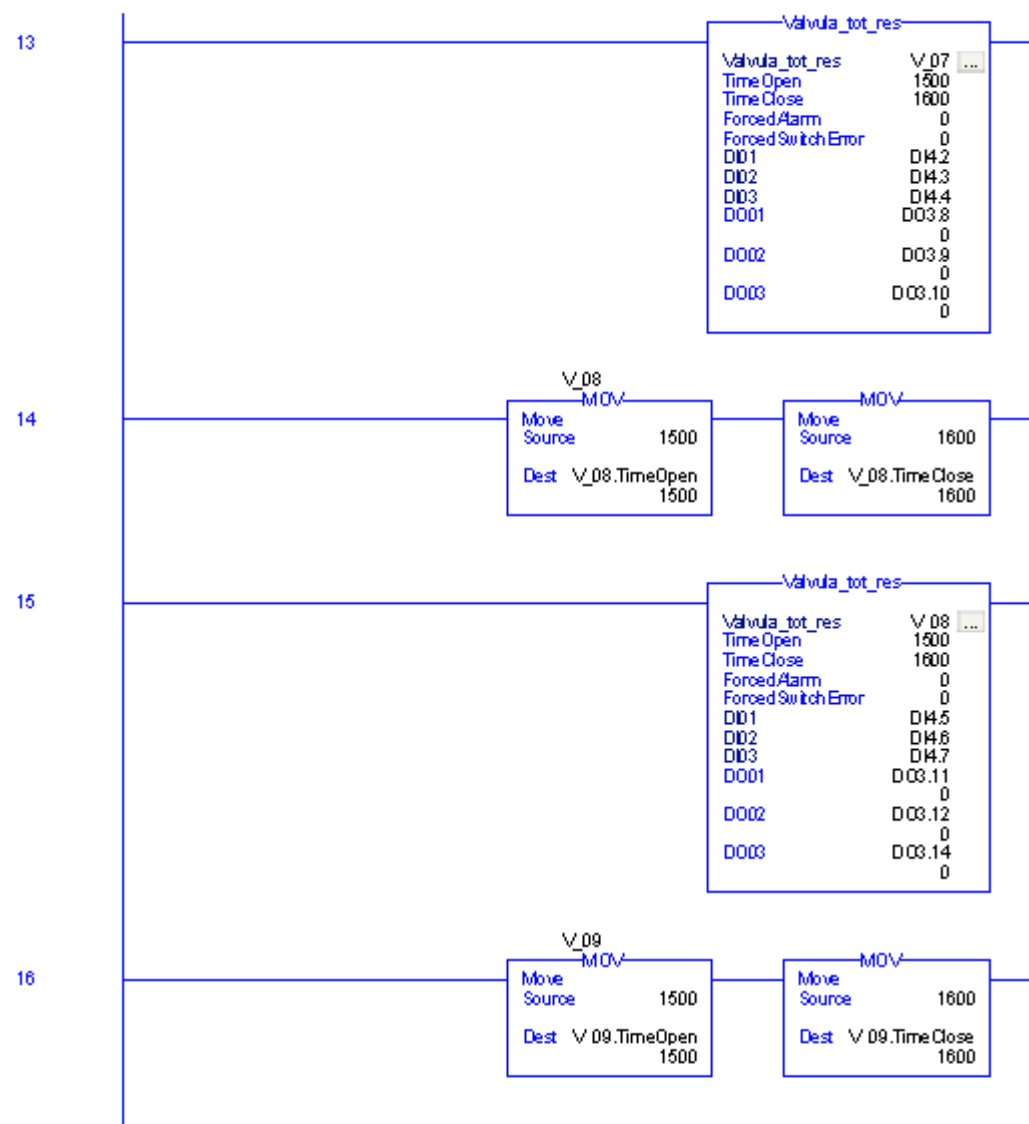
Page 211

gbo:PlantSimulation:Plant\_Simulation

01/01/2017 14:20:00

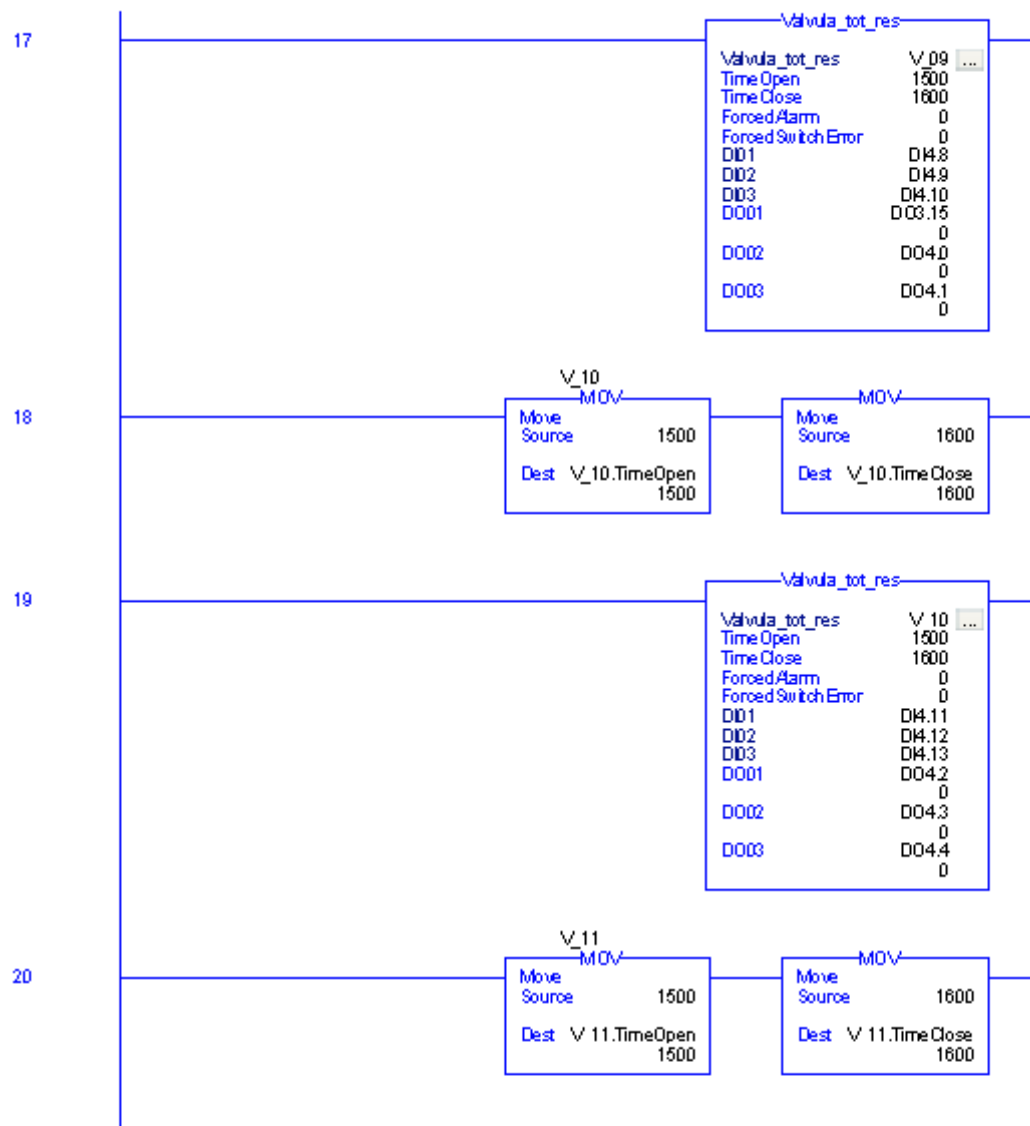
total number of rungs in routine: 32

C:\Documents and Settings\Administrador\Escritorio\gbo\_ACI



RST.nbr 5001

30\_VALEY VALVE\_101\_1103 - Ladder Diagram  
 Page 227  
 01/01/2017 14:20:00  
 C:\Documents and Settings\Administrador\Escritorio\figbo.ACD  
 Total number of rungs in routine: 32



ESLogix 5000

## 10 VALVULA TOT RES - Ladder Diagram

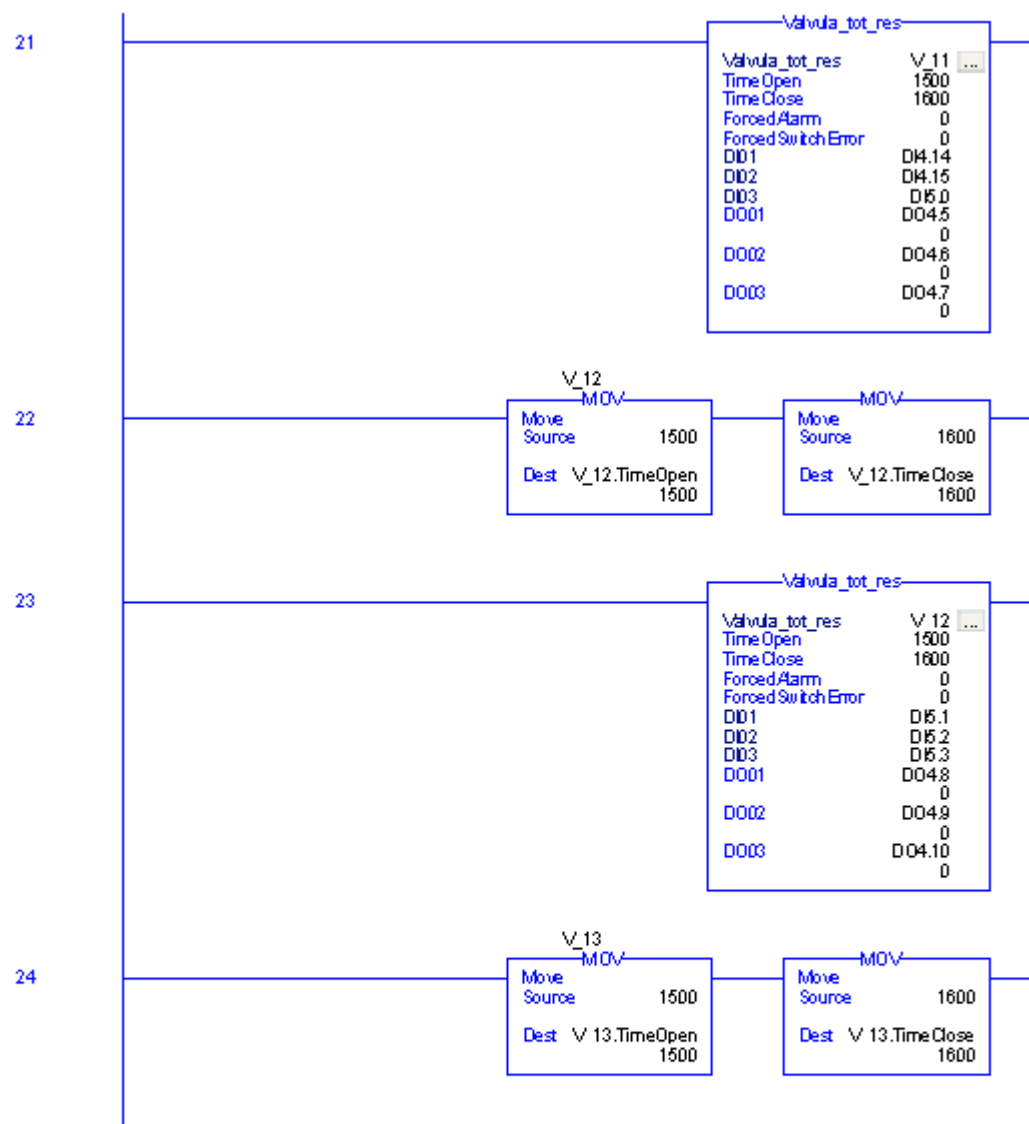
Page 220

gbo:PlantSimulation:Plant\_Simulation

01/01/2017 14:20:00

total number of rungs in routine: 32

C:\Documents and Settings\Administrador\Escritorio\gbo\_A.CD



RSLogix 5000

## 10 VALVULA\_TOT\_RES - Ladder Diagram

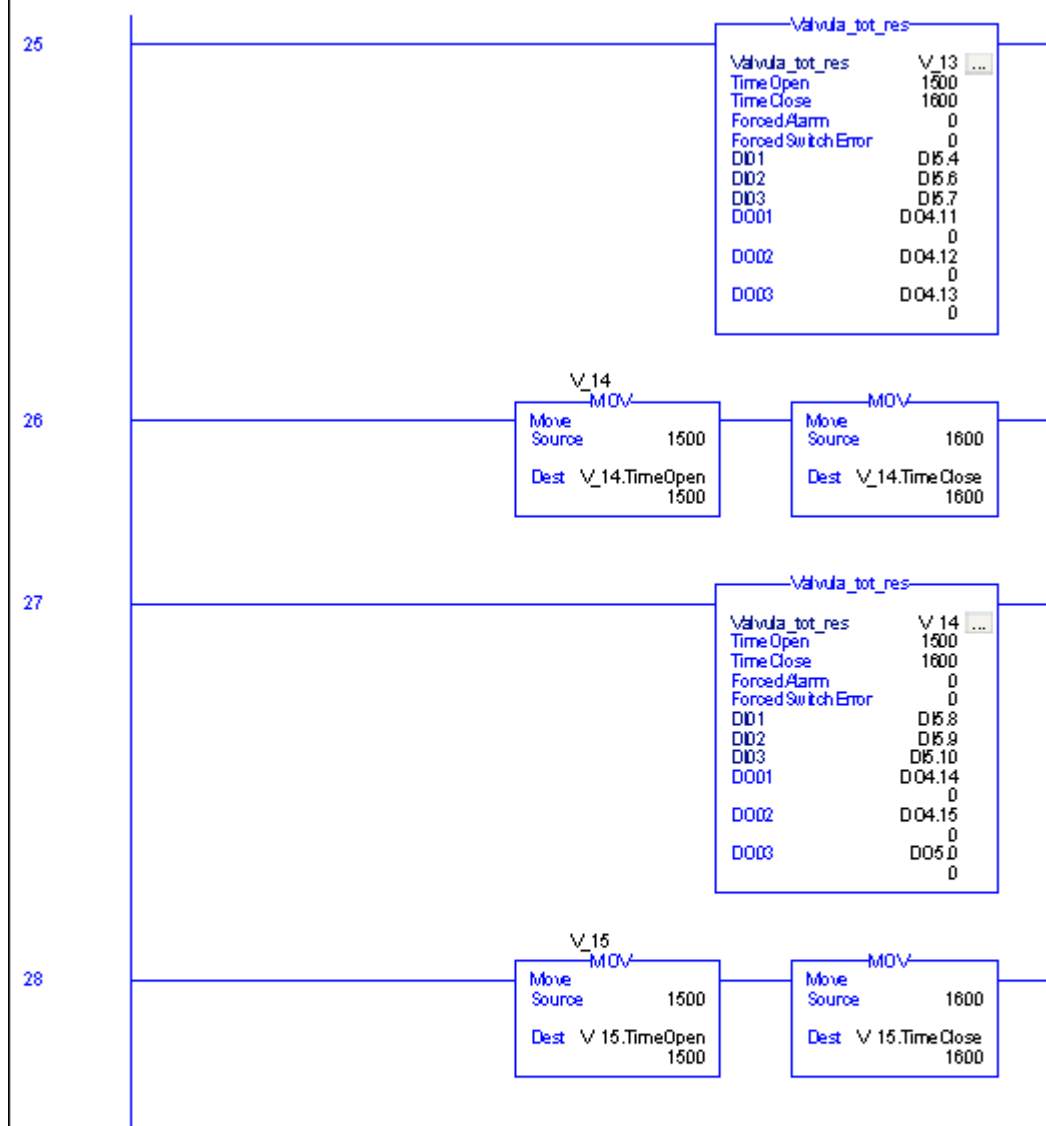
Page 221

Hgo:PhatSimulation:Phat\_Simulation

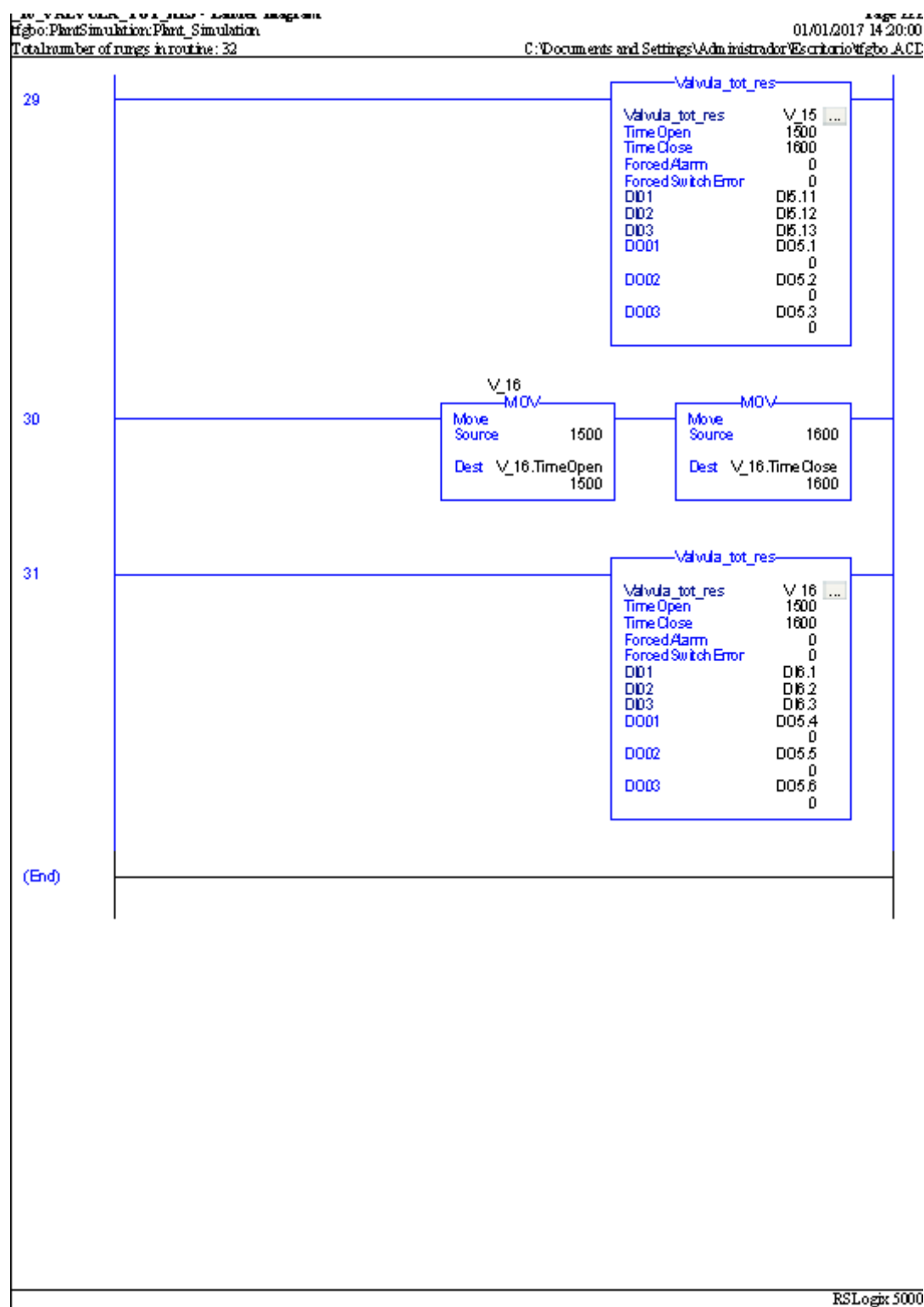
01/01/2017 14:20:00

Total number of rungs in routine: 32

C:\Documents and Settings\Administrador\Escritorio\Hgo\_A.CD



RSLogix 5000





## **LOOPS**

# 0 L00PS - Ladder Diagram

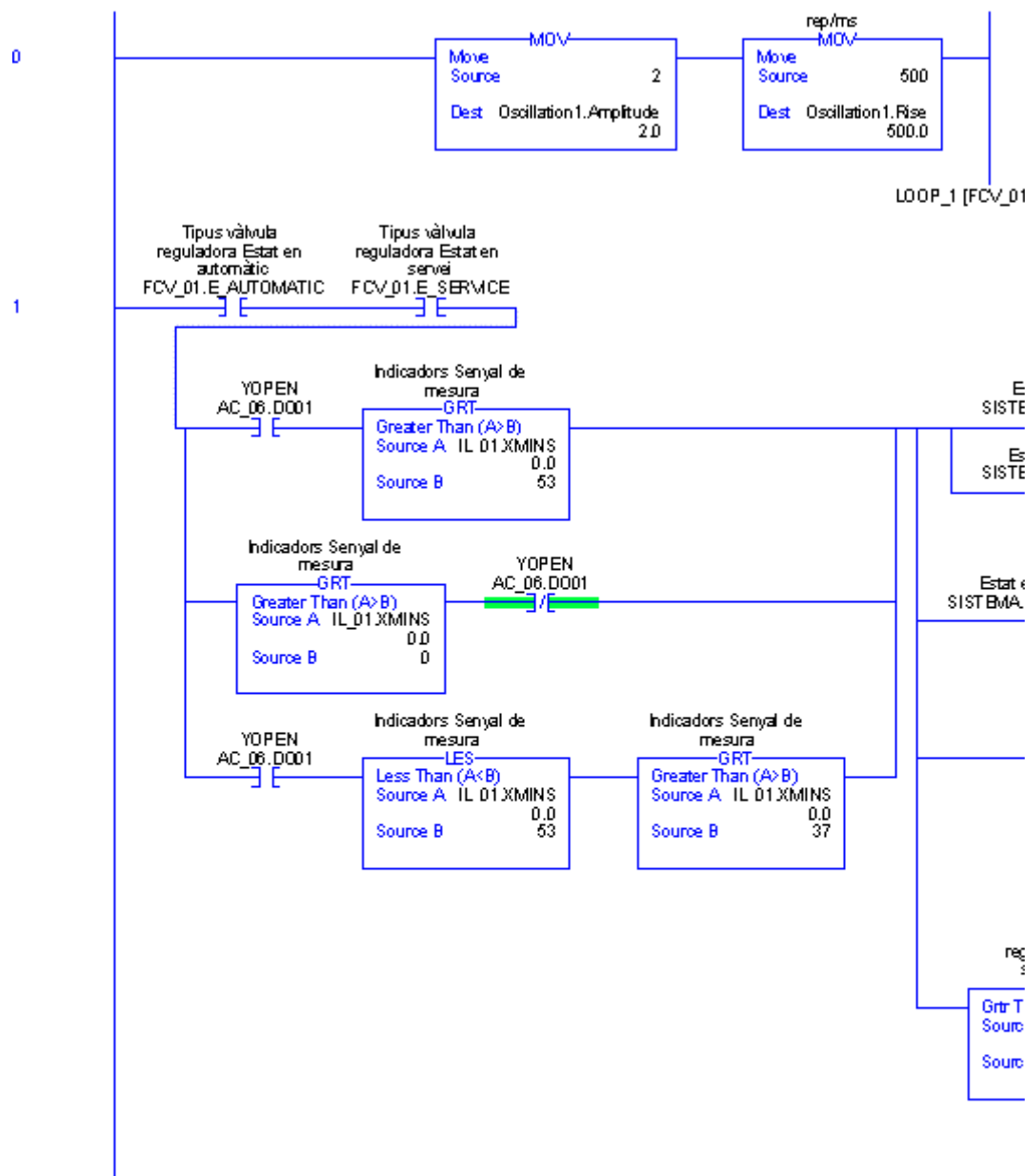
p0:PhatSimulation:Phat\_Simulation

total number of rungs in routine: 6

Page 223

01/01/2017 14:20:01

C:\Documents and Settings\Administrador\Escritorio\Figbo\_A.C.D



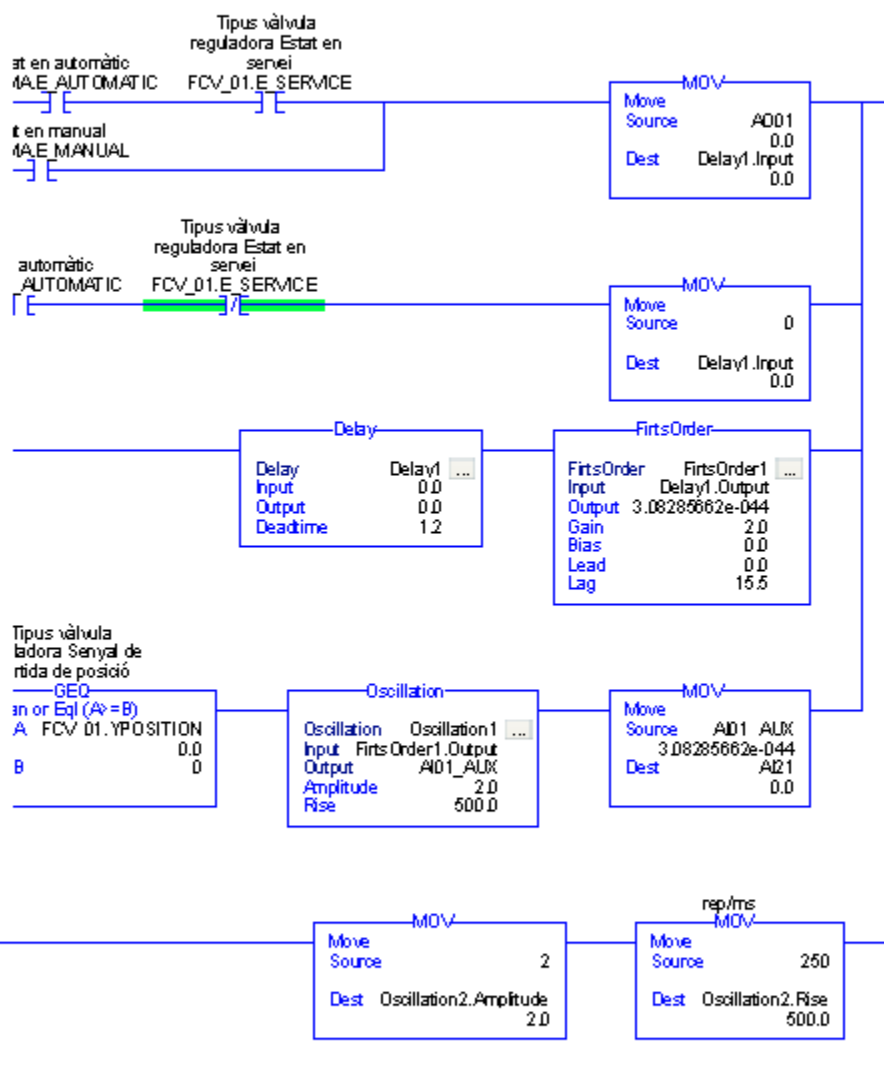
RSLogix 5000

20 L00FS - Ladder Diagram  
 Figbo:PhntSimulation:Phnt\_Simulation  
 Total number of rungs in routine: 6

Page 224  
 01/01/2017 14:20:01

C:\Documents and Settings\Administrador\Escriptori\figbo.ACD

FIT\_01]

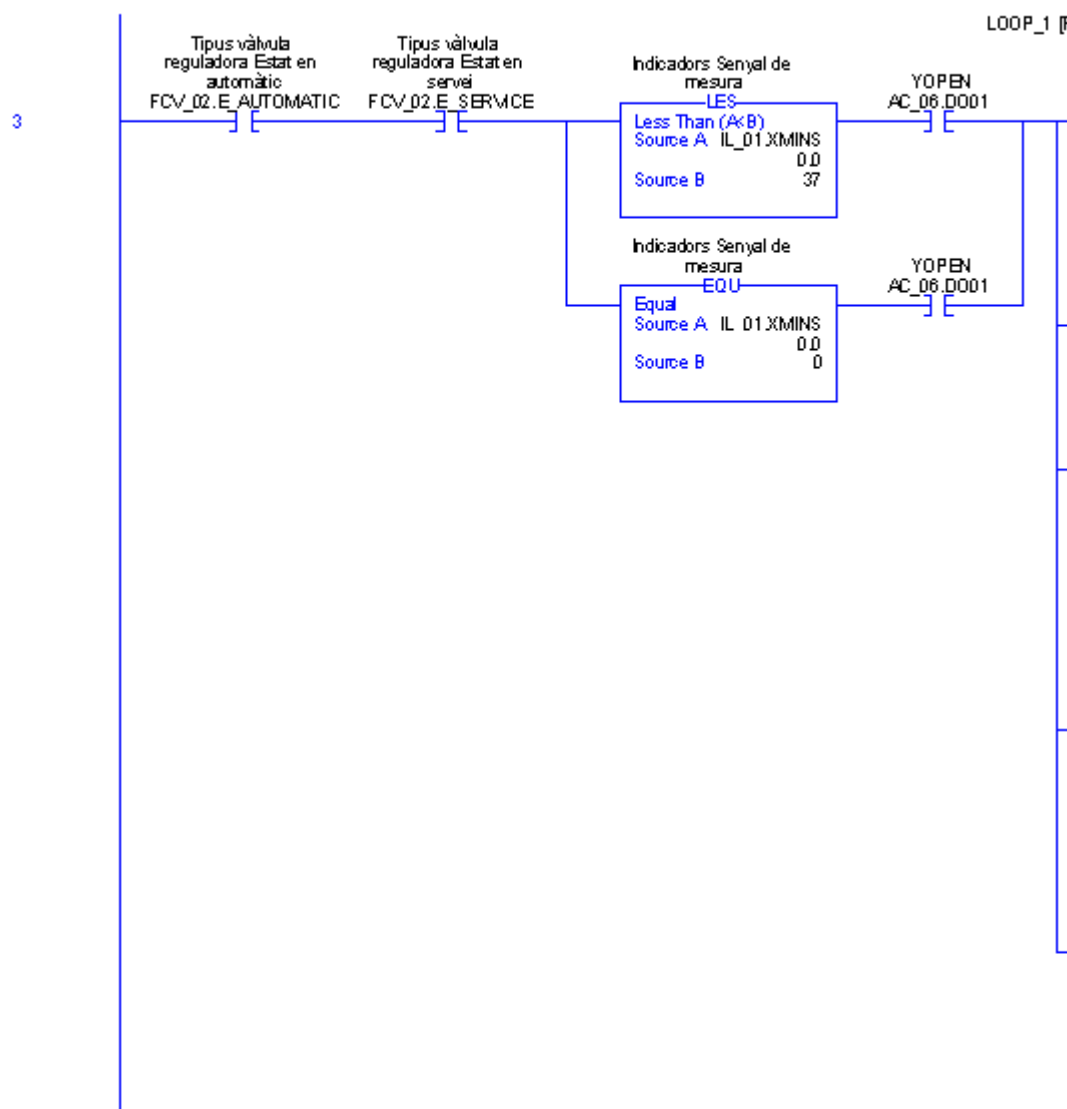


RSLogix 5000

20\_LOOPS - Ladder Diagram  
 fgho:PlantSimulation:Plant\_Simulation  
 Total number of rungs in routine: 6

Page 445  
 01/01/2017 14:20:01  
 C:\Documents and Settings\Administrador\Escritorio\fgbo\_ACD

LOOP\_1 [F



RSLogix 5000

## 20 L00FS - Ladder Diagram

fgo:PlantSimulation:Plant\_Simulation

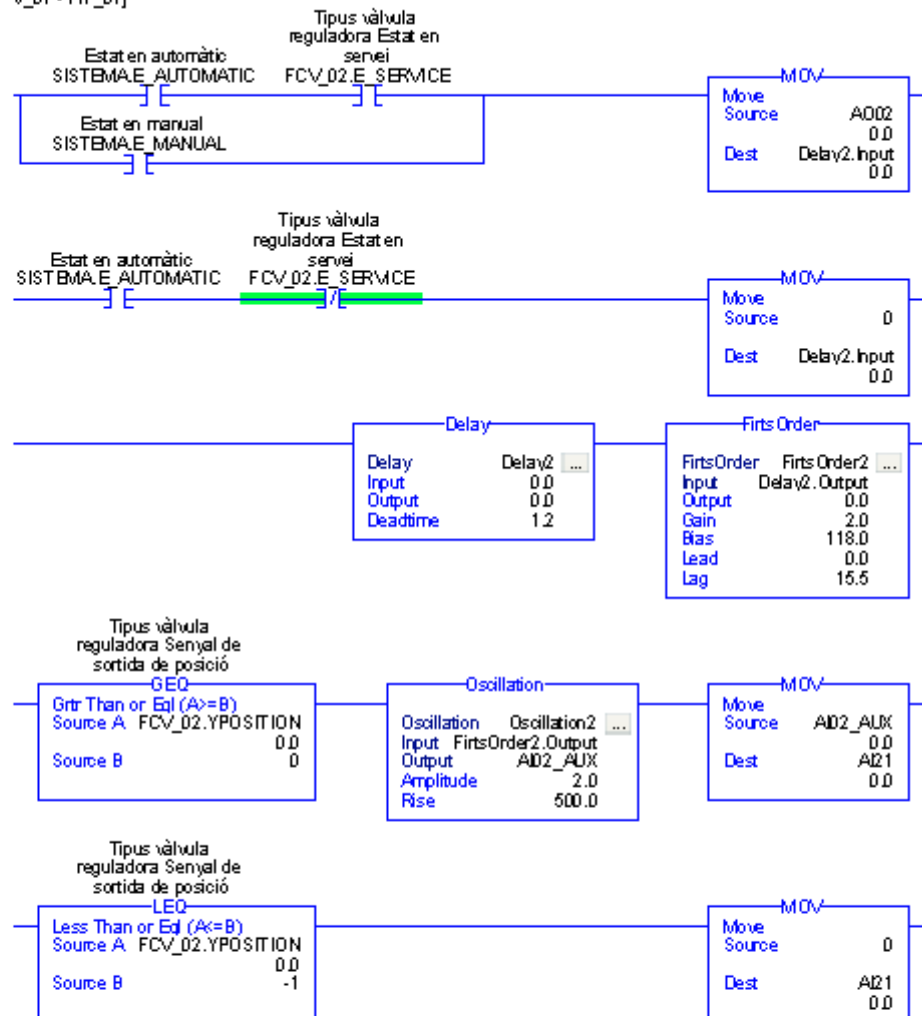
Total number of rungs in routine: 6

Page 226

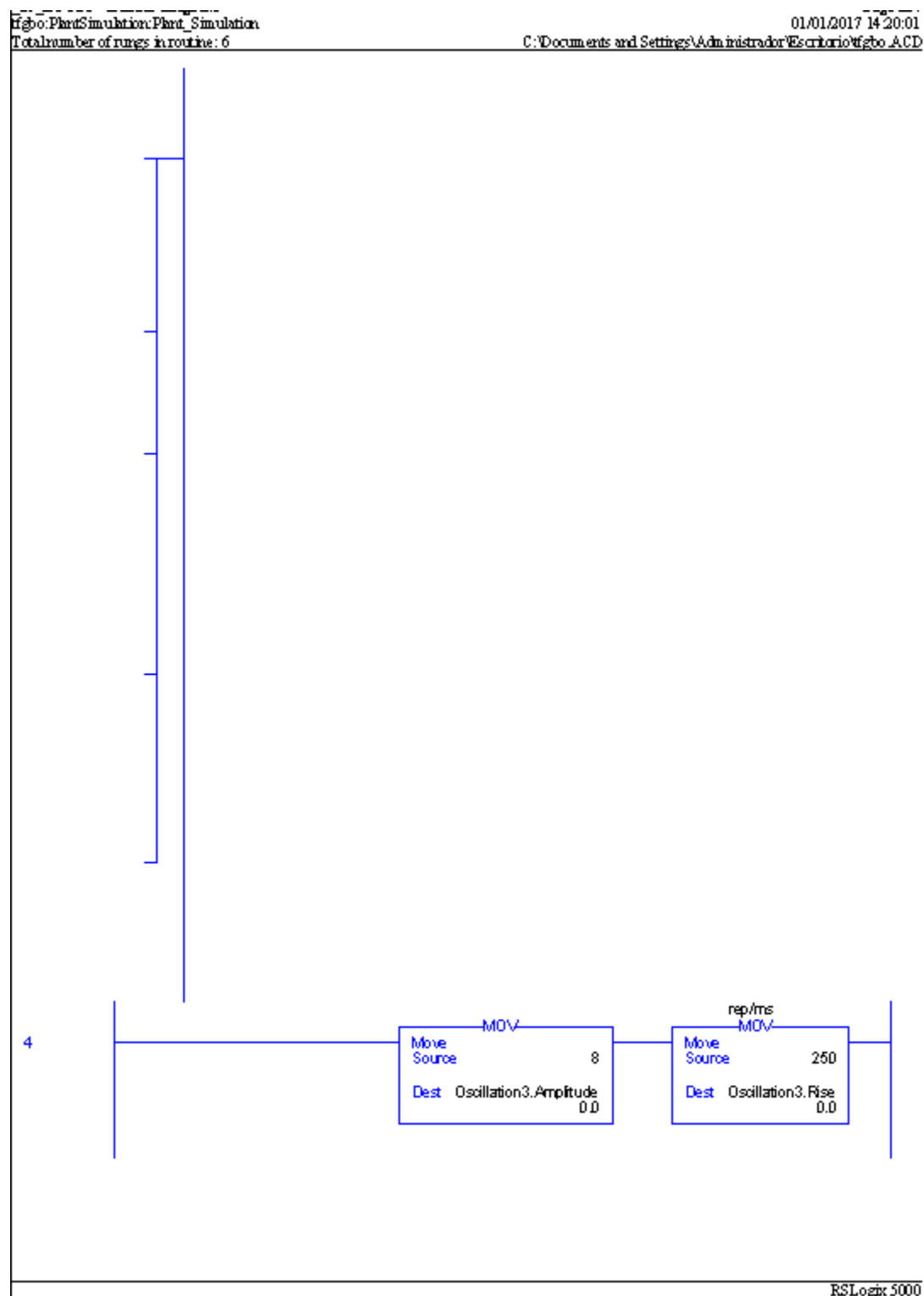
01/01/2017 14:20:01

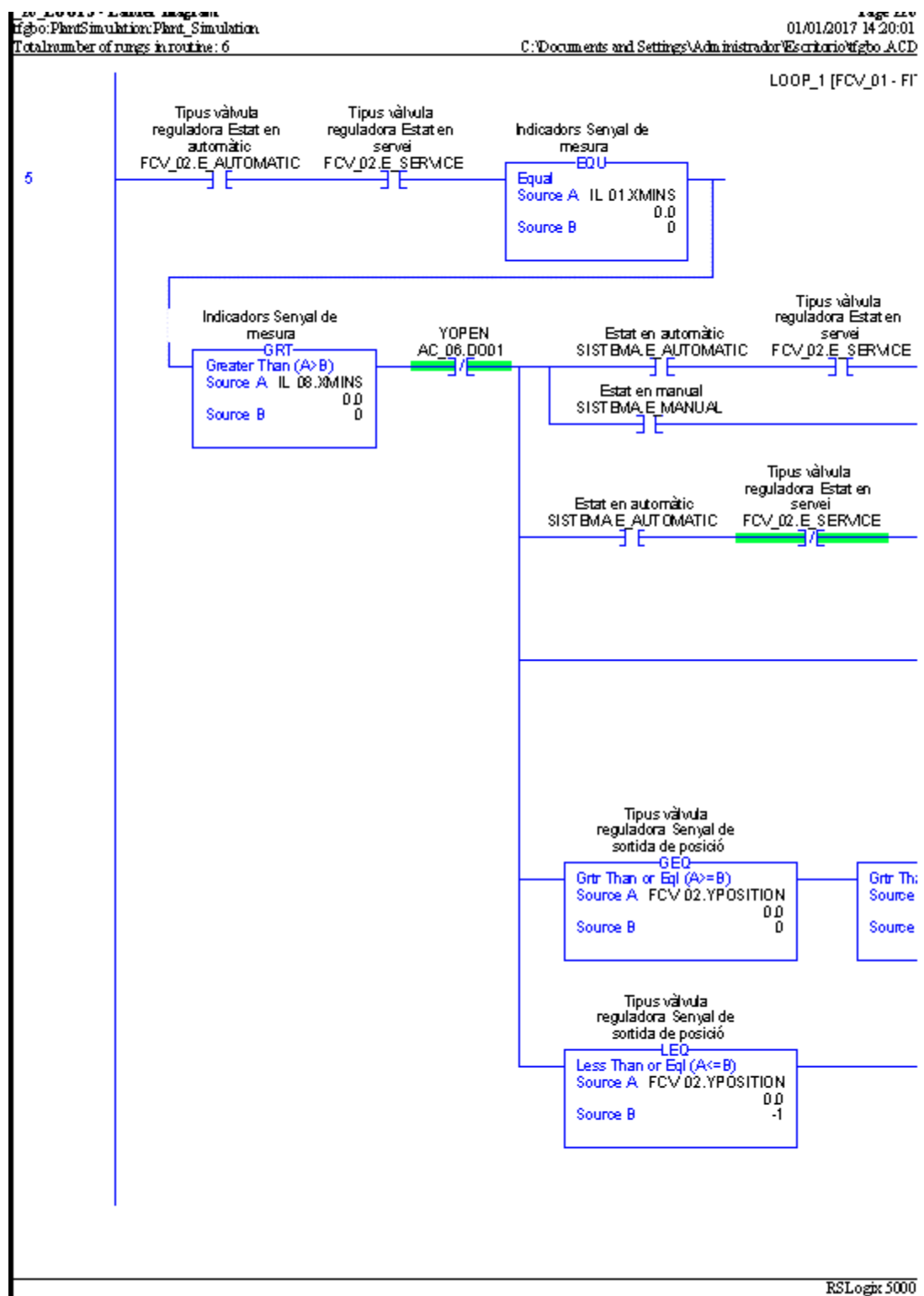
C:\Documents and Settings\Administrador\Escriptori\fgo.ACD

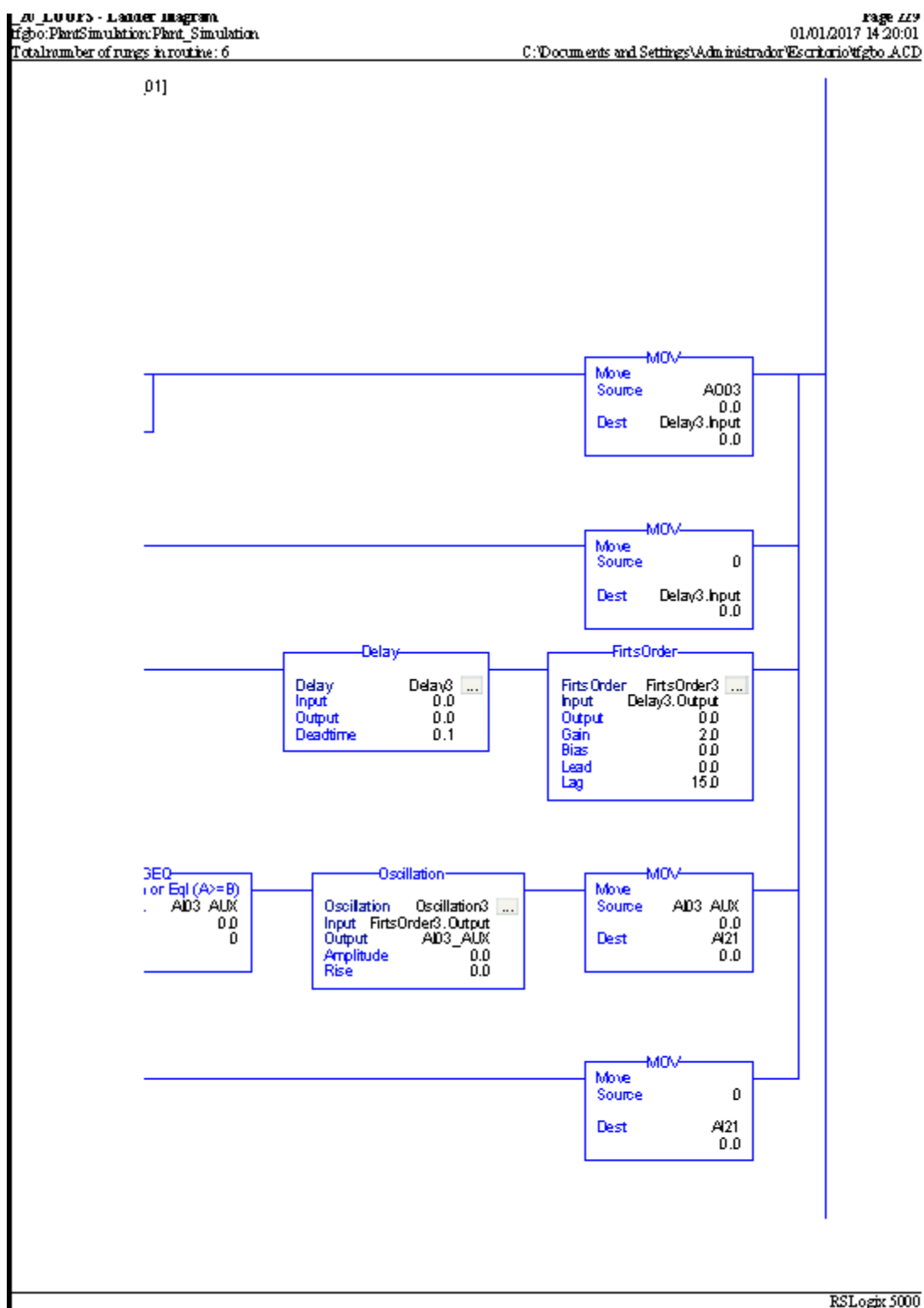
V\_01 - FIT\_01]



RSLogix 5000









## **ESCALFADORS**

30 CALENTADORS - Ladder Diagram

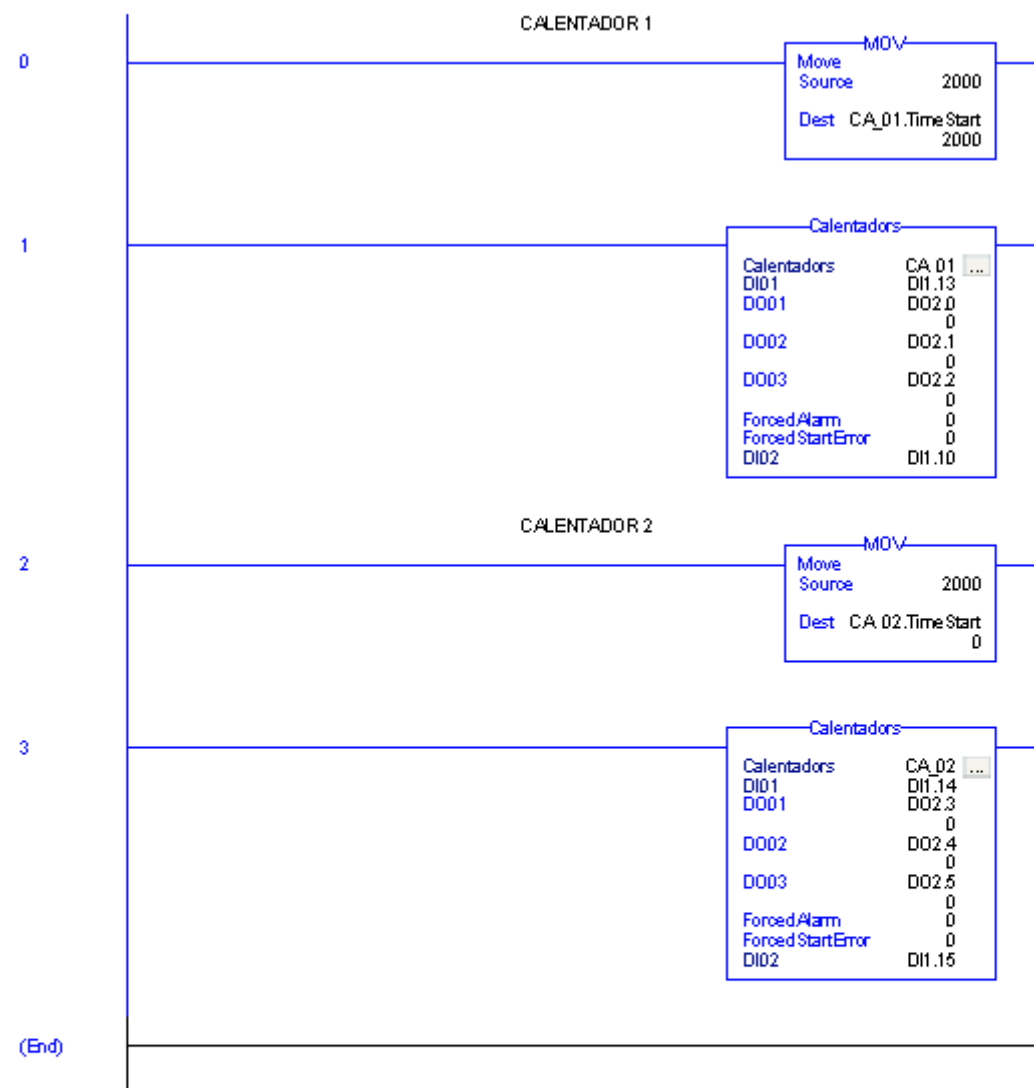
Figbo:PlantSimulation:Plant\_Simulation

Total number of rungs in routine: 4

Page 231

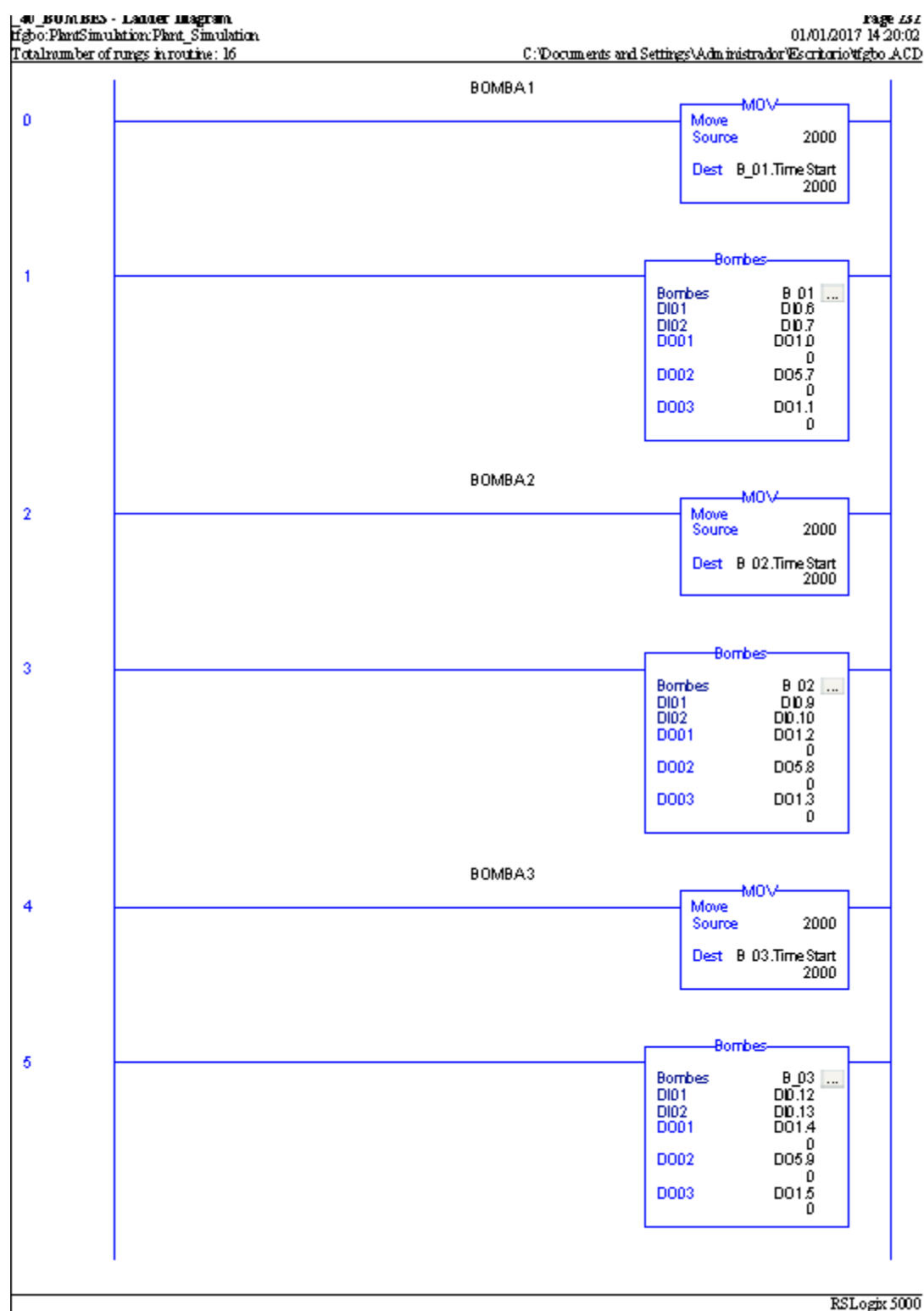
01/01/2017 14:20:01

C:\Documents and Settings\Administrador\Escritorio\Figbo ACD

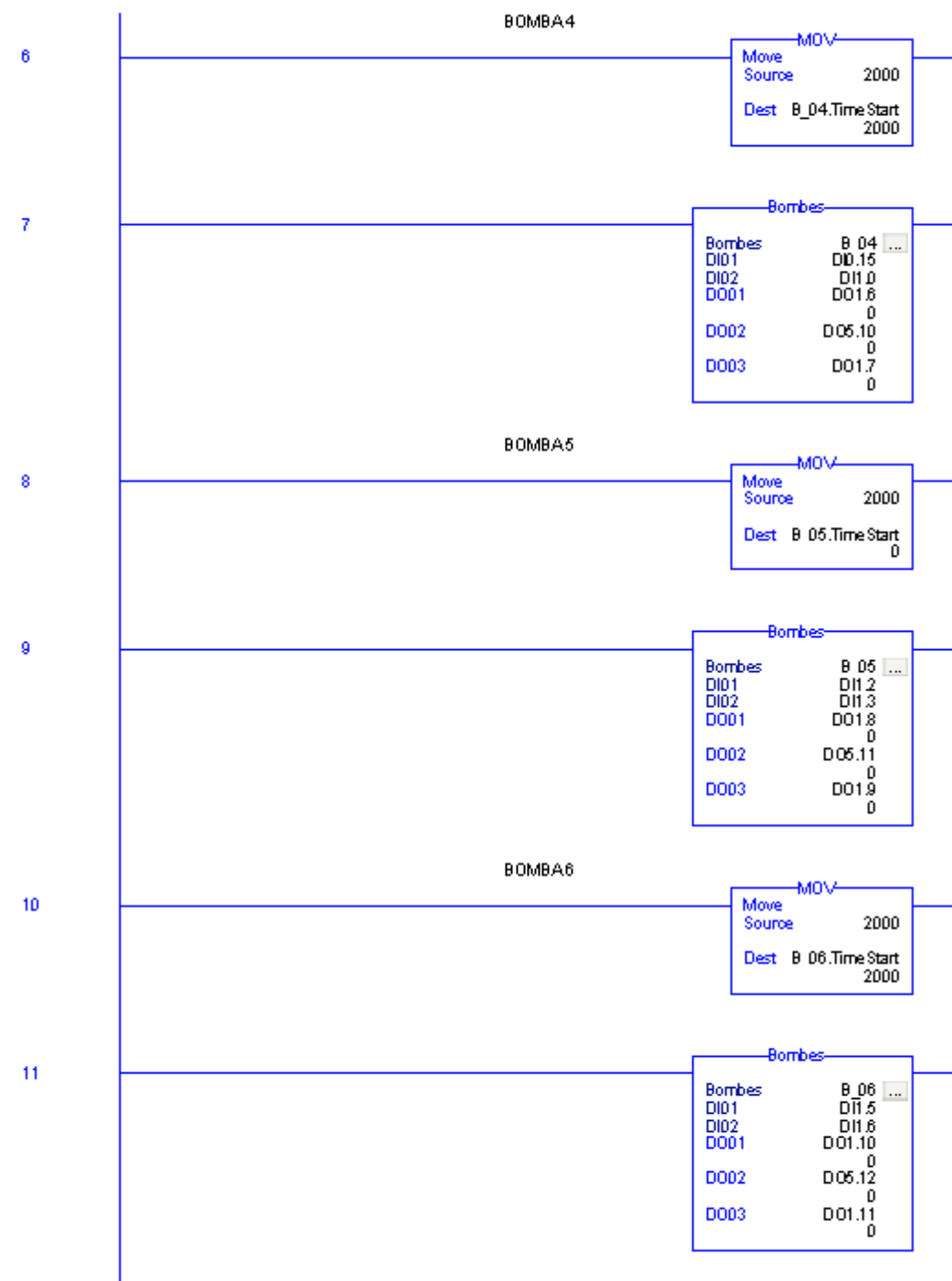


RST:netix 5000

## **BOMBES**



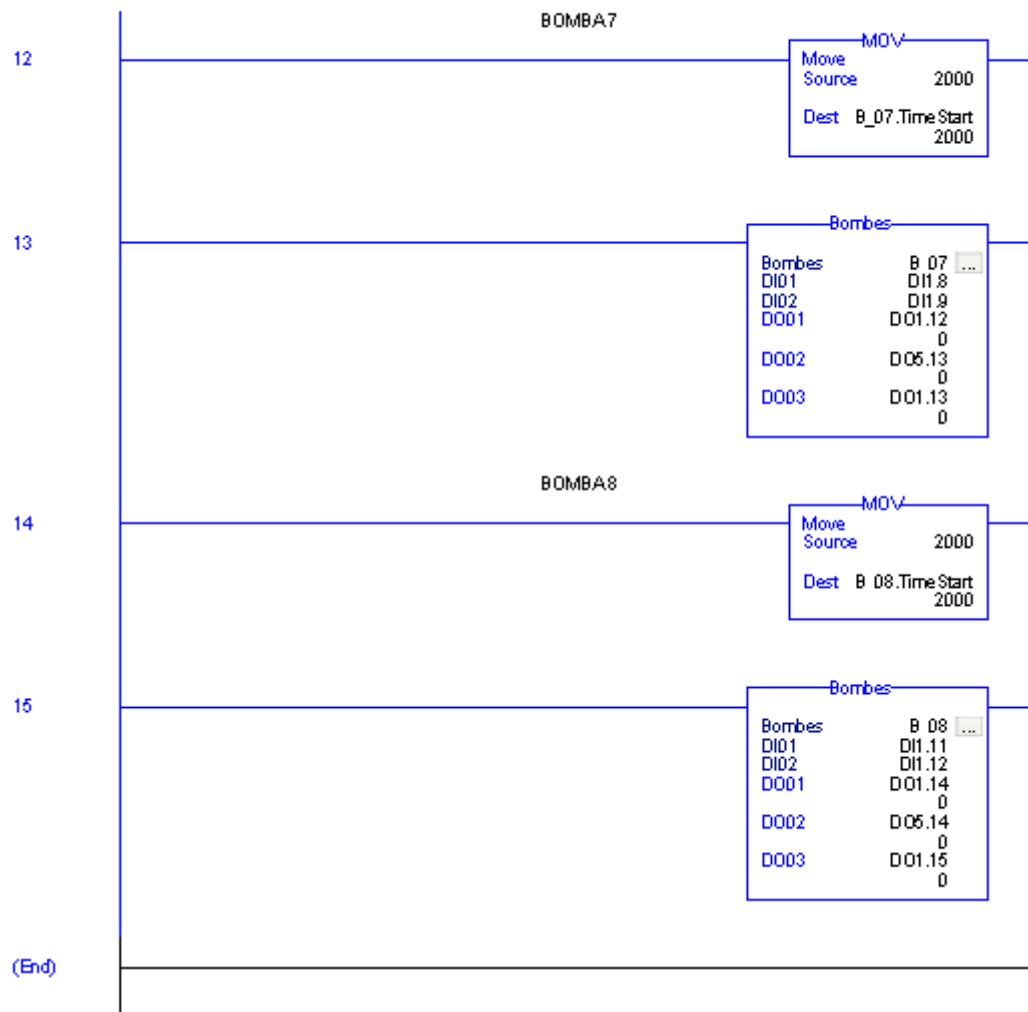
160:PlantSimulation:Plant\_Simulation  
 01/01/2017 14:20:02  
 Total number of rungs in routine: 16 C:\Documents and Settings\Administrador\Escritori\160bo\_ACD



RSLopx 5000

PLC - Ladder Logic Program  
 fgo:PlantSimulation:Plant\_Simulation  
 Total number of rungs in routine: 16

01/01/2017 14:20:02  
 C:\Documents and Settings\Administrador\Escritorio\fgbo\_ACI



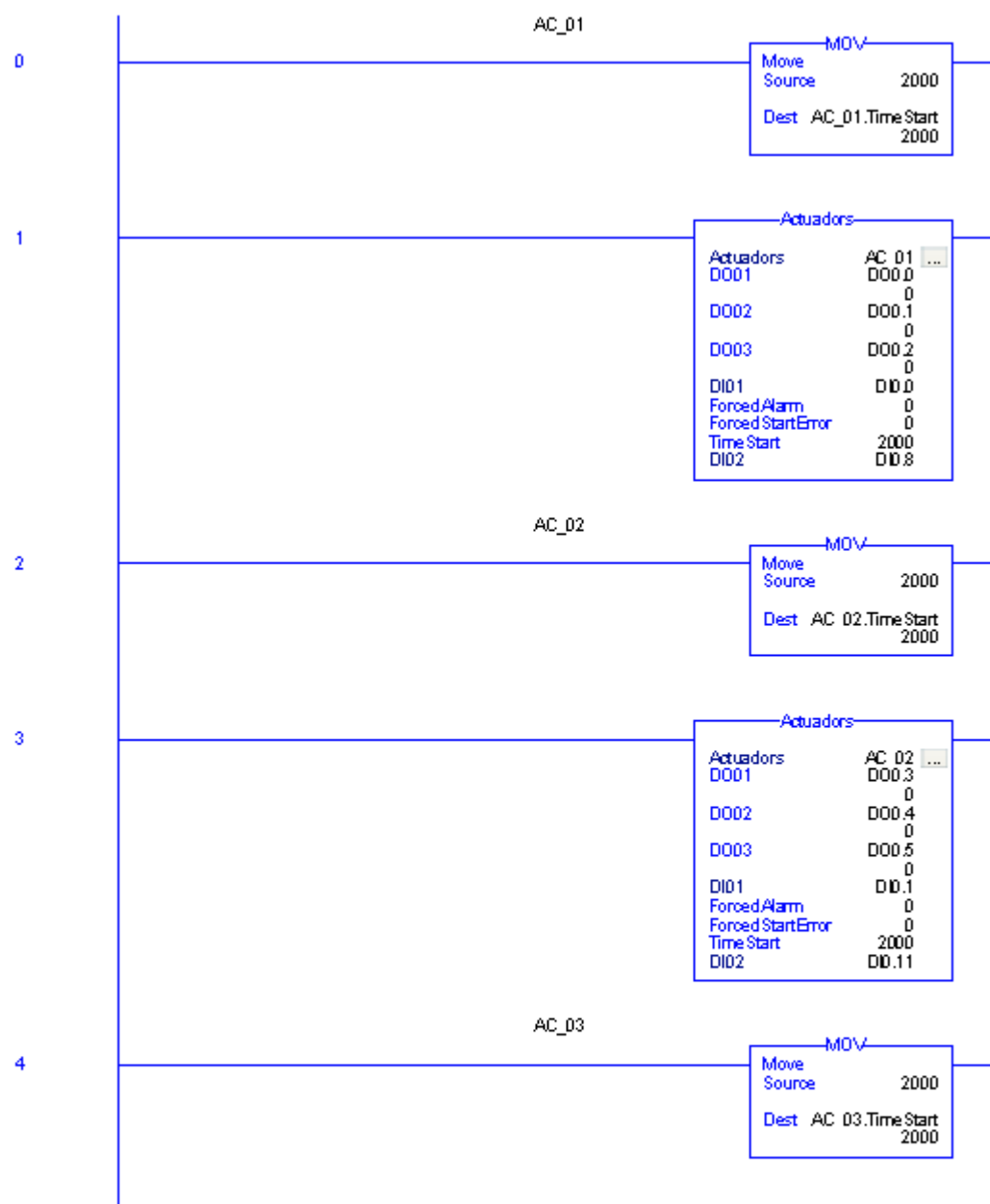
RSLogix 5000

## **ACTUADORS**

figbo:PlantSimulation:Plant\_Simulation  
Total number of rungs in routine: 12

Page 200  
01/01/2017 14:20:02

C:\Documents and Settings\Administrador\Escritorio\figbo ACT



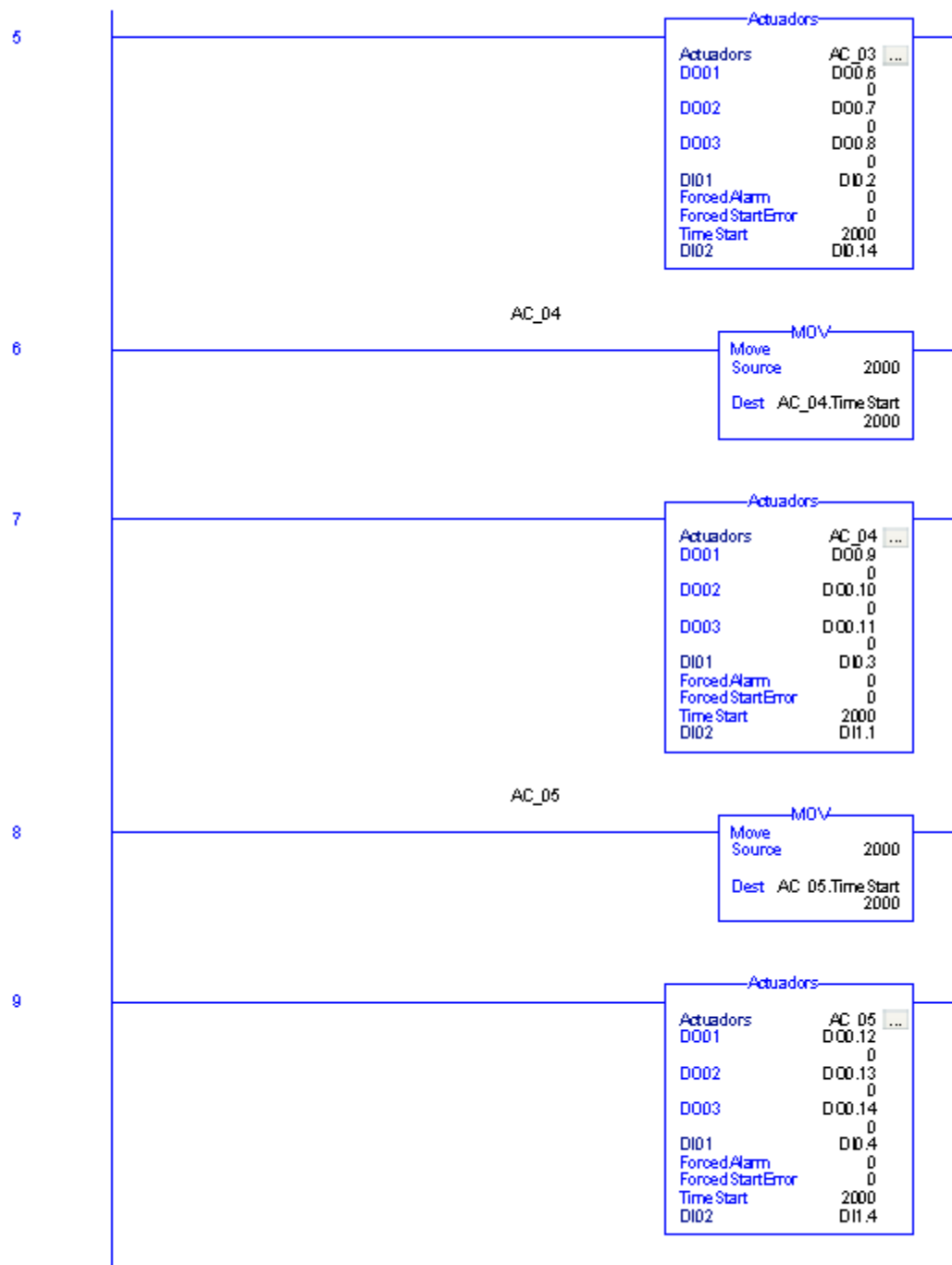
RSLogix 5000



50 Actuador - Ladder Diagram  
 fgb0:PlantSimulation:Plant\_Simulation  
 Total number of rungs in routine: 12

Page 250  
 01/01/2017 14:20:03

C:\Documents and Settings\Administrador\Escritori\fgb0.ACD

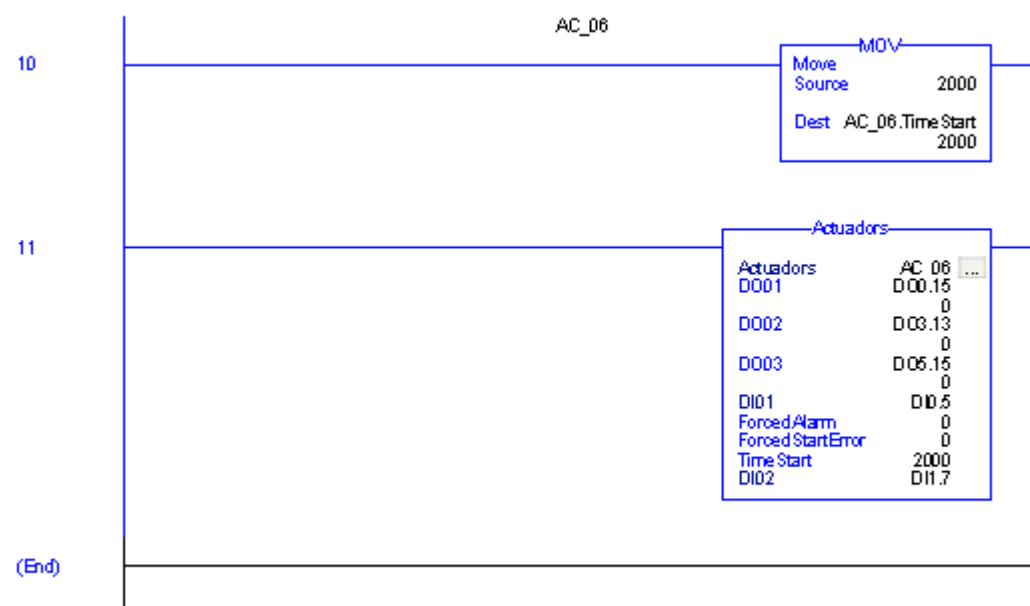


RSLogix 5000

C:\Program Files\Siemens\STEP 7  
 gbo:PlantSimulation\Plant\_Simulation  
 total number of rungs in routine: 12

01/01/2017 14:20:03

C:\Documents and Settings\Administrador\Escritorio\gbo\_ACD



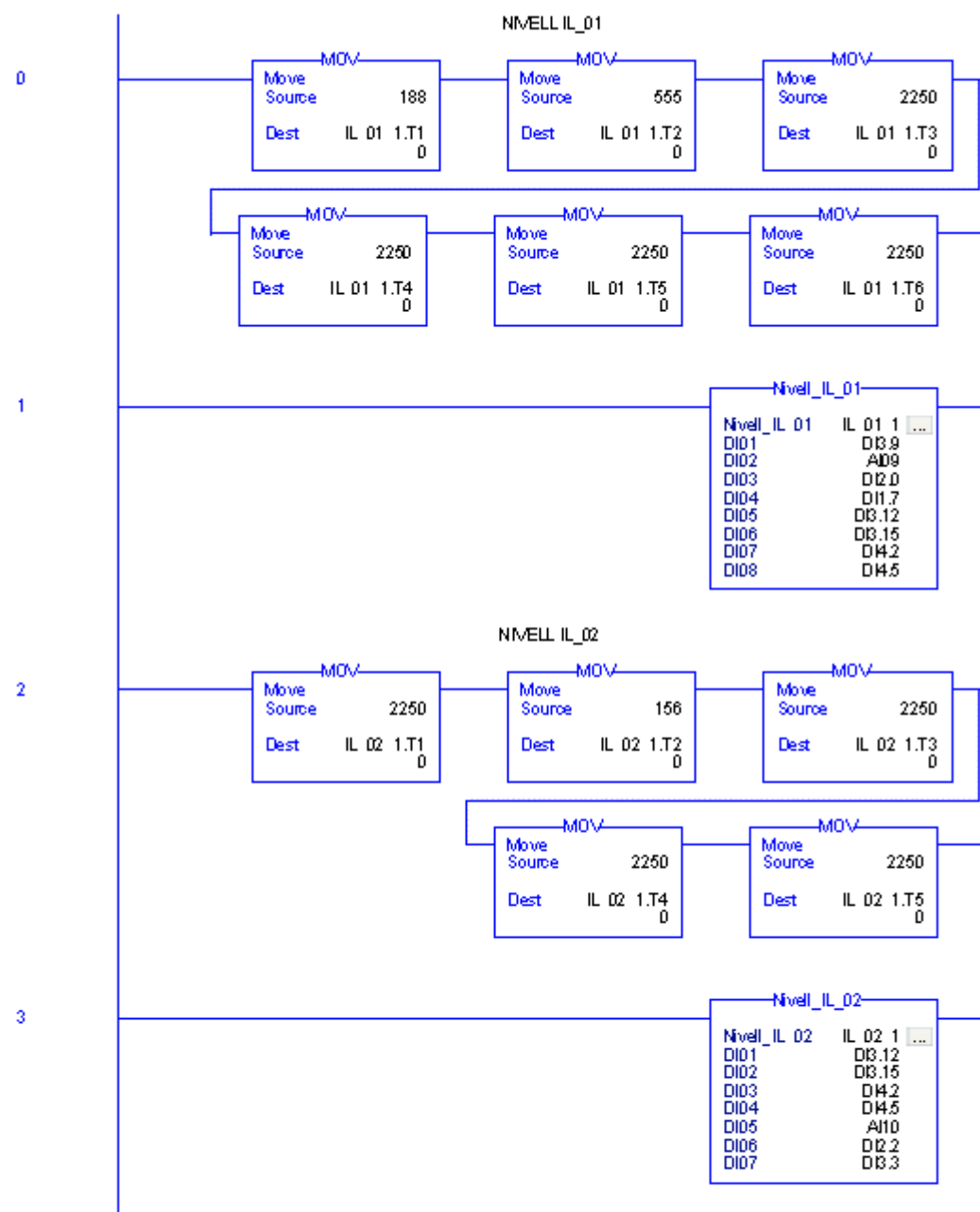
## **NIVELL IT**

60 NIVELL IT - Ladder Diagram  
 fgo:PlantSimulation:Plant\_Simulation  
 Total number of rungs in routine: 17

Page 238

01/01/2017 14:20:03

C:\Documents and Settings\Administrador\Escritorio\Wfgo\_ACD



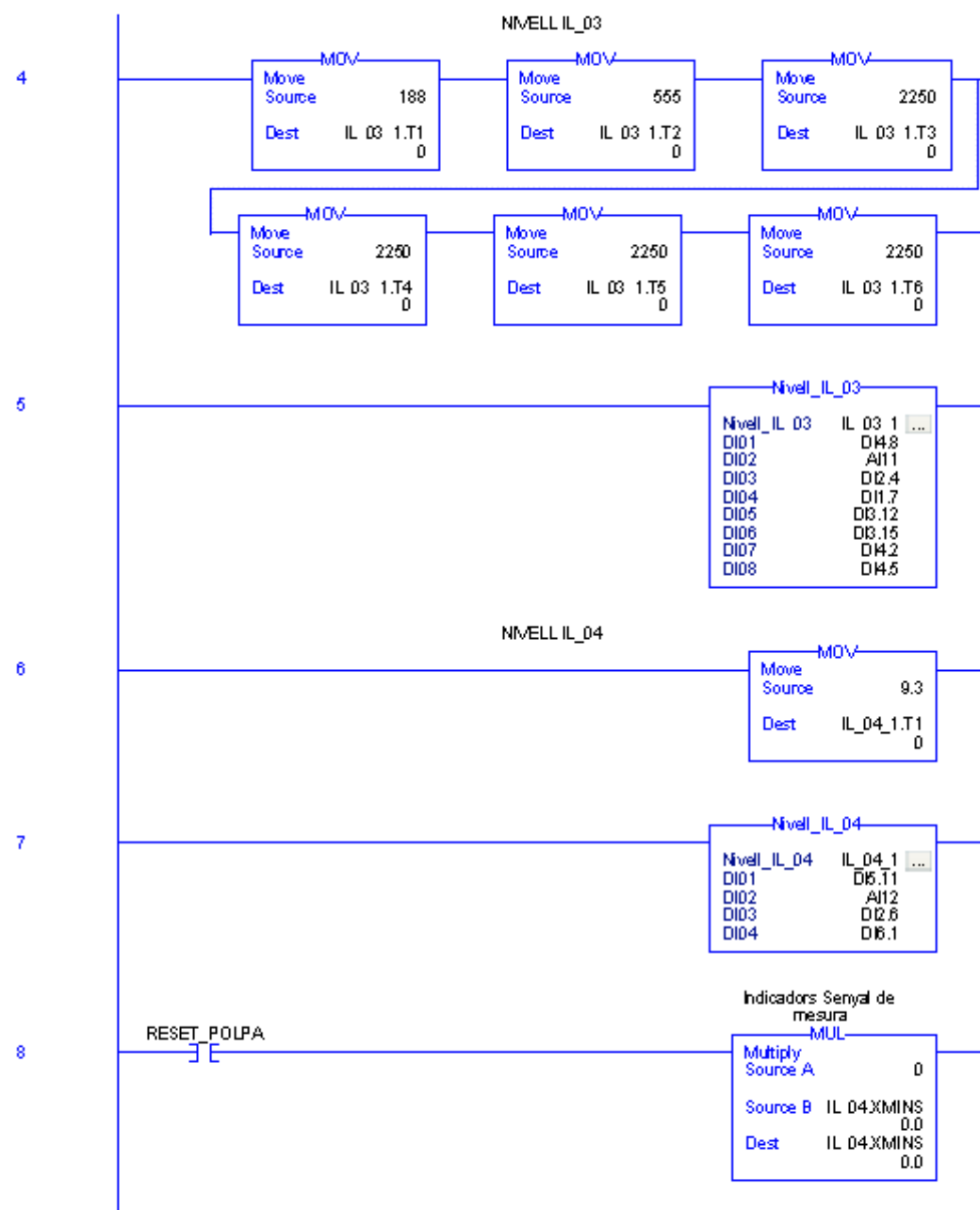
RSLogix 5000

60 NIVELL\_IL - Ladder Diagram  
 fgo:PlantSimulation:Plant\_Simulation  
 Total number of rungs in routine: 17

Page 239

01/01/2017 14:20:03

C:\Documents and Settings\Administrador\Escritorio\fgbo\_ACD



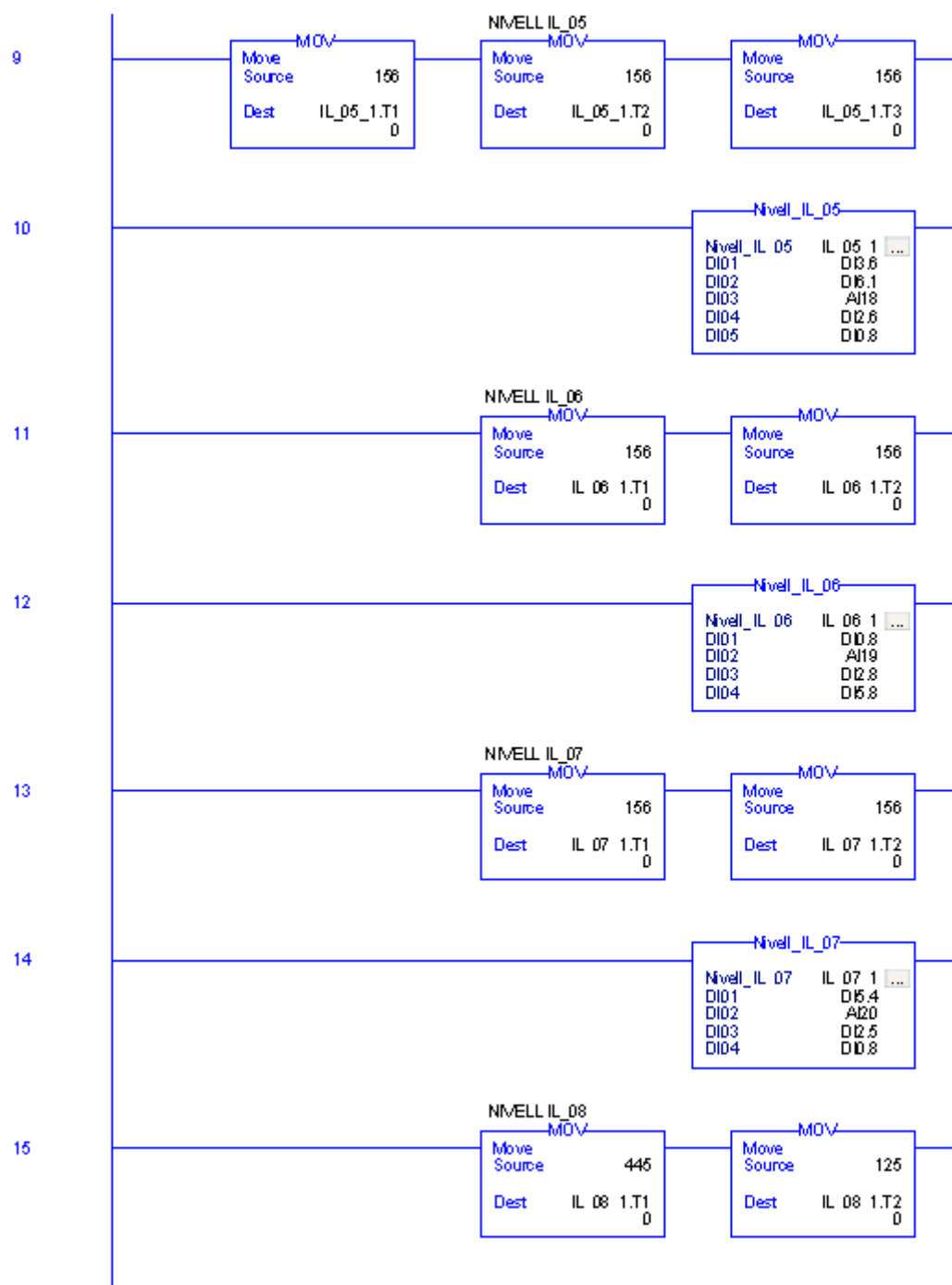
RST.net 5000

60 NIVELL IT - Ladder Diagram  
 fgo:PhatSimulation:Phat\_Simulation  
 Total number of rungs in routine: 17

Page 244

01/01/2017 14:20:03

C:\Documents and Settings\Administrador\Escritorio\fgo.ACI



RSLogix 5000

00\_NIVELL\_IL - Ladder Diagram

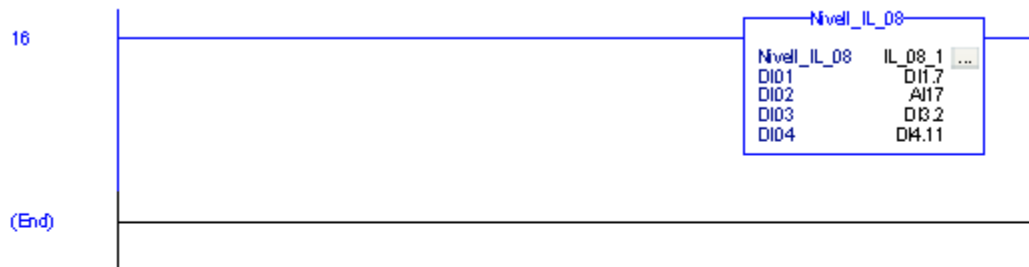
Page 241

figbo:PlantSimulation:Plant\_Simulation

01/01/2017 14:20:03

Total number of rungs in routine: 17

C:\Documents and Settings\Administrador\Escritorio\figbo.ACD



RSLogix 5000



*1.1.4. Add-On*

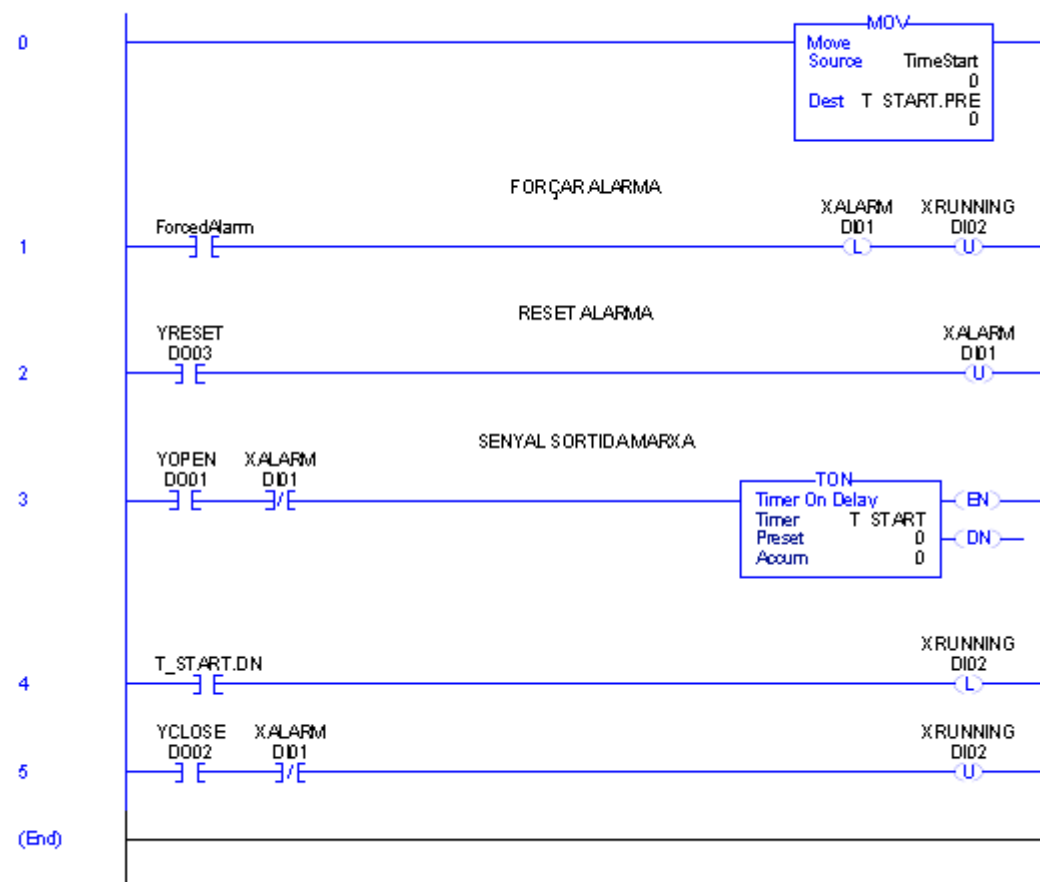
## **ACTUADORS**



gbo: Add-On Instructions: Actuadors: Logic  
 total number of rungs in routine: 6  
 data Context: Actuadors <definition>

01/01/2017 14:20:05

C:\Documents and Settings\Administrador\Escritori\gbo.ACD



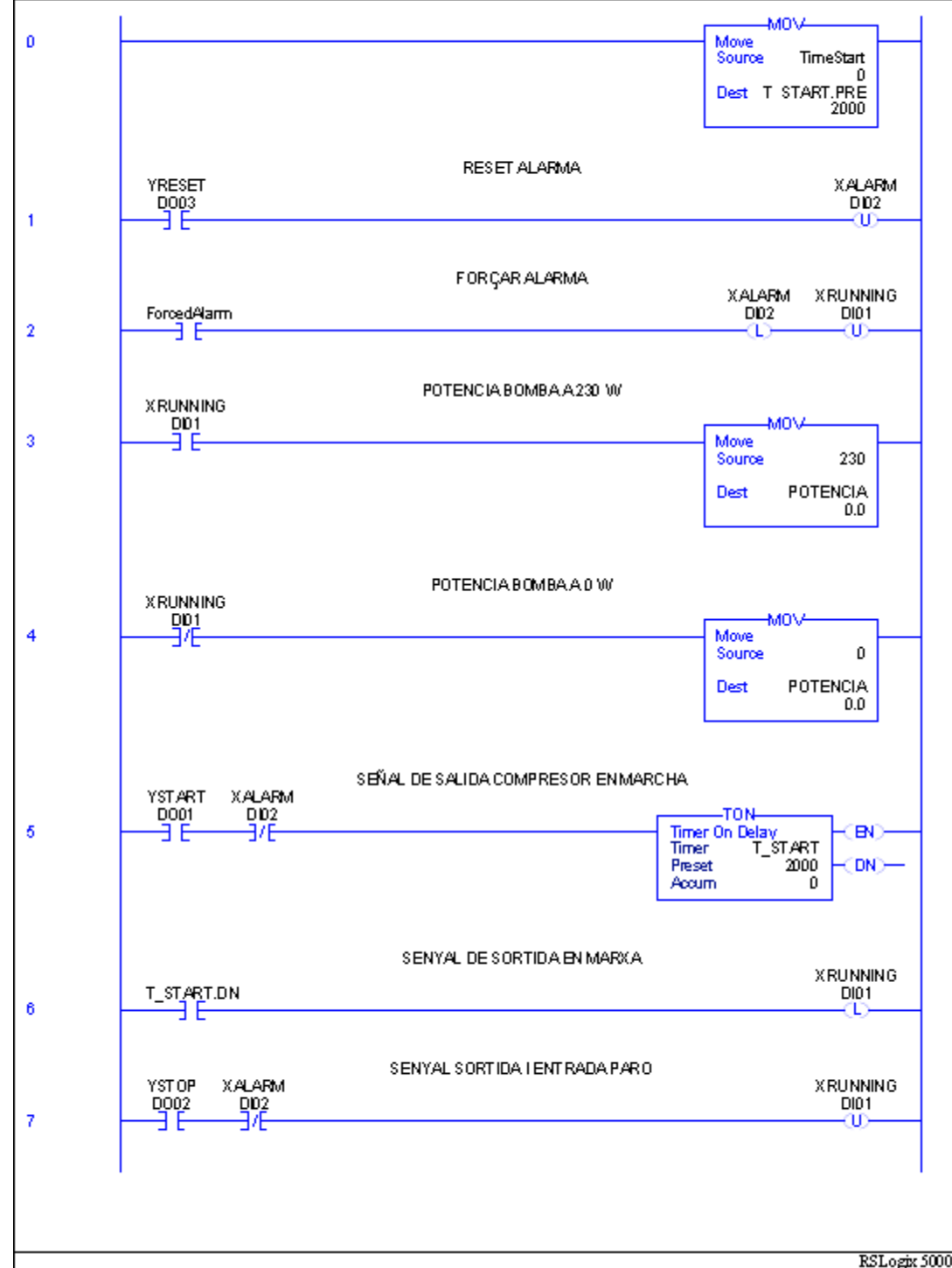
RST.net 5000

## **BOMBES**

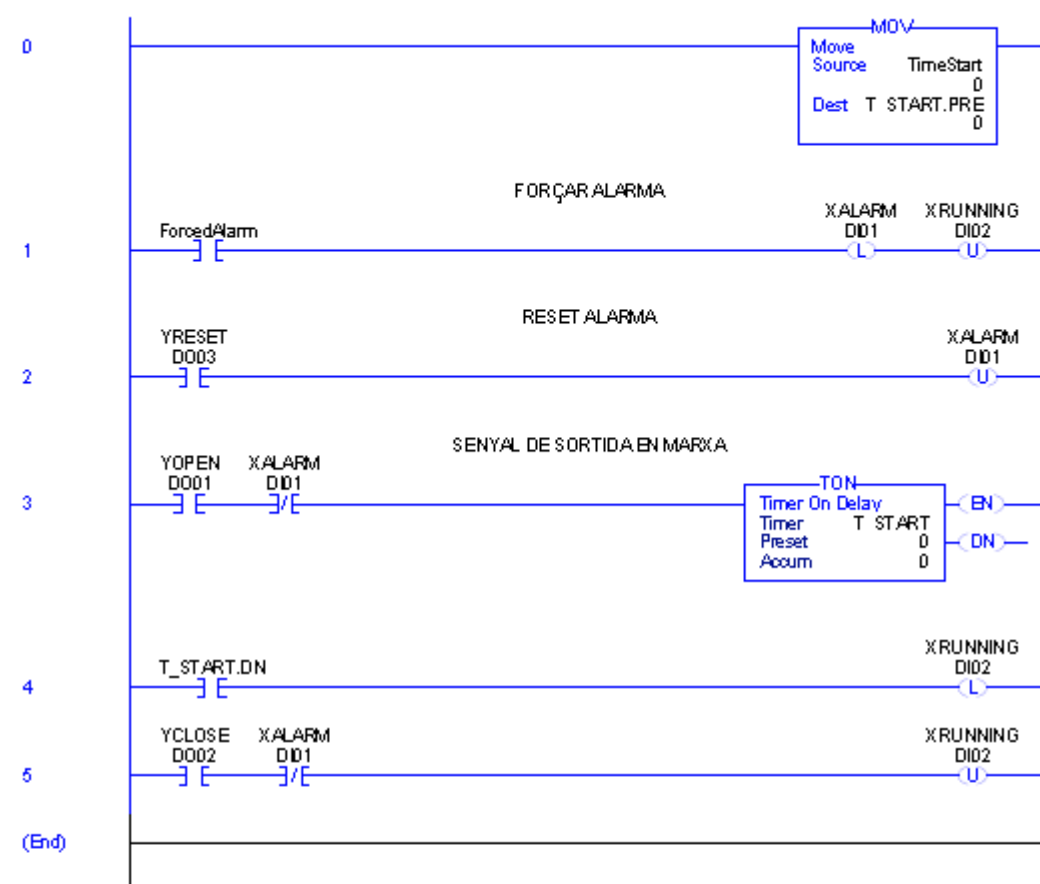
Figbo: Add-On Instructions: Bombes Logic  
 Total number of rungs in routine: 8  
 Data Context: Bombes <definition>

01/01/2017 14:20:07

C:\Documents and Settings\Administrador\Escritori\figbo.ACD



## ESCALFADORS



## **IL 01**

## Nivell\_IL\_01 Instruction Definition - Logic Routine

fgbo: Add-On Instructions: Nivell\_IL\_01 Logic

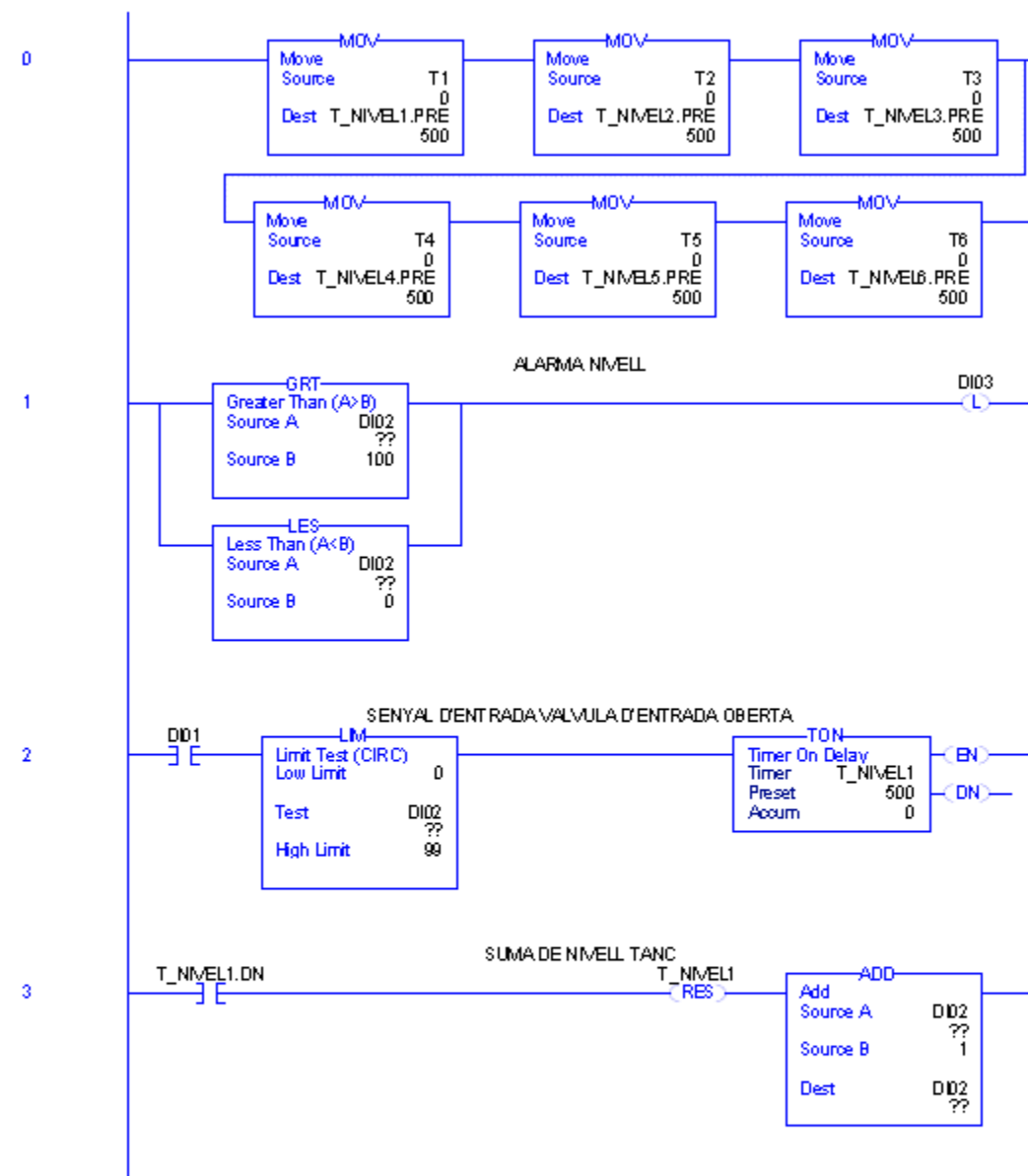
Total number of rungs in routine: 14

&gt;Data Context: Nivell\_IL\_01 &lt;definition&gt;

Page 269

01/01/2017 14:20:28

C:\Documents and Settings\Administrador\Escritori\fgbo\_ACD



ESLogix 5000

## Nivell\_IL\_01 Instruction Definition - Logic Routine

Hgho: Add-On Instructions Nivell\_IL\_01 Logic

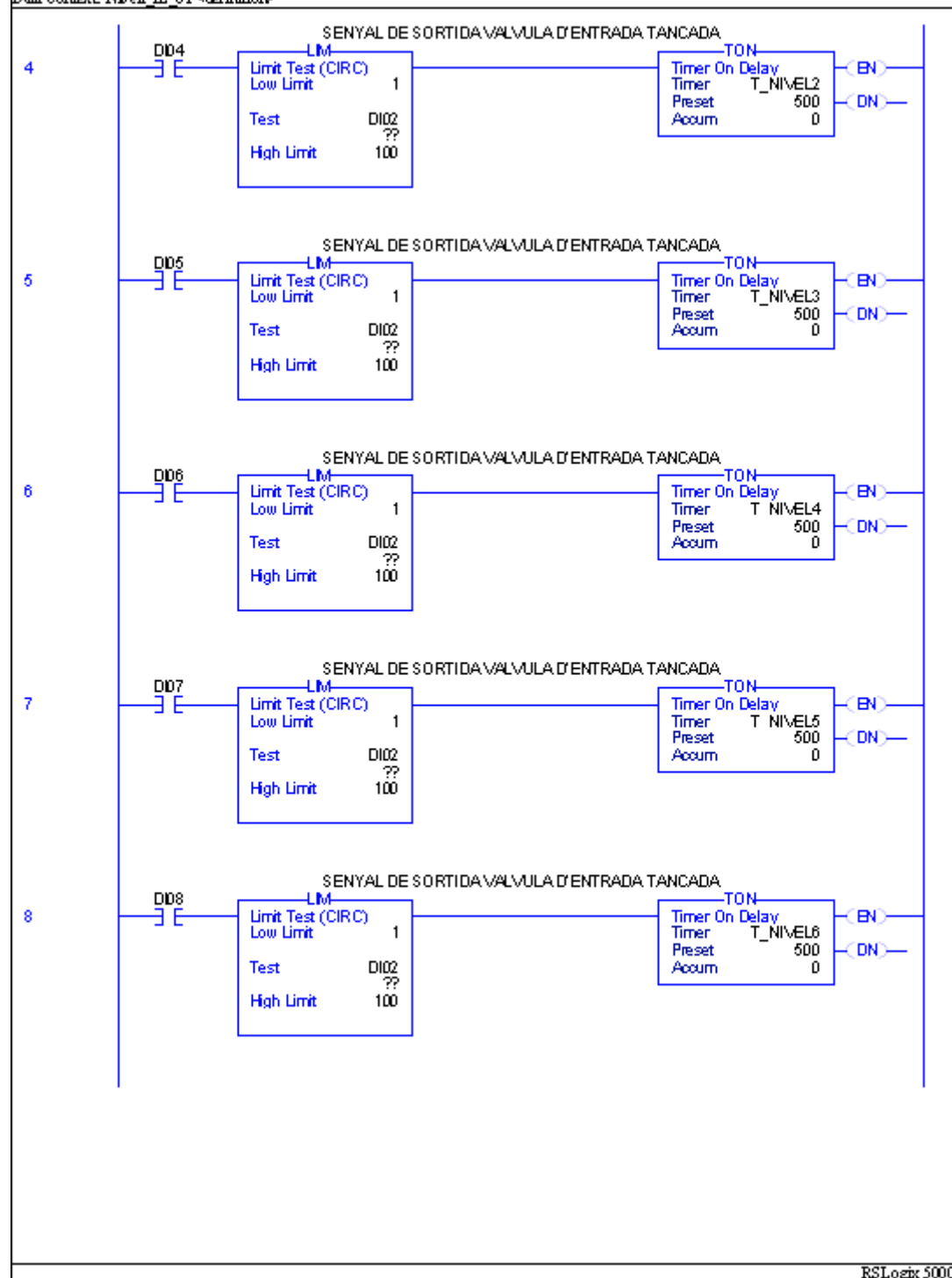
Total number of rungs in routine: 14

Data Context: Nivell\_IL\_01 &lt;definition&gt;

Page 270

01/01/2017 14:20:29

C:\Documents and Settings\Administrador\Escritorio\Hgho\_A.CD



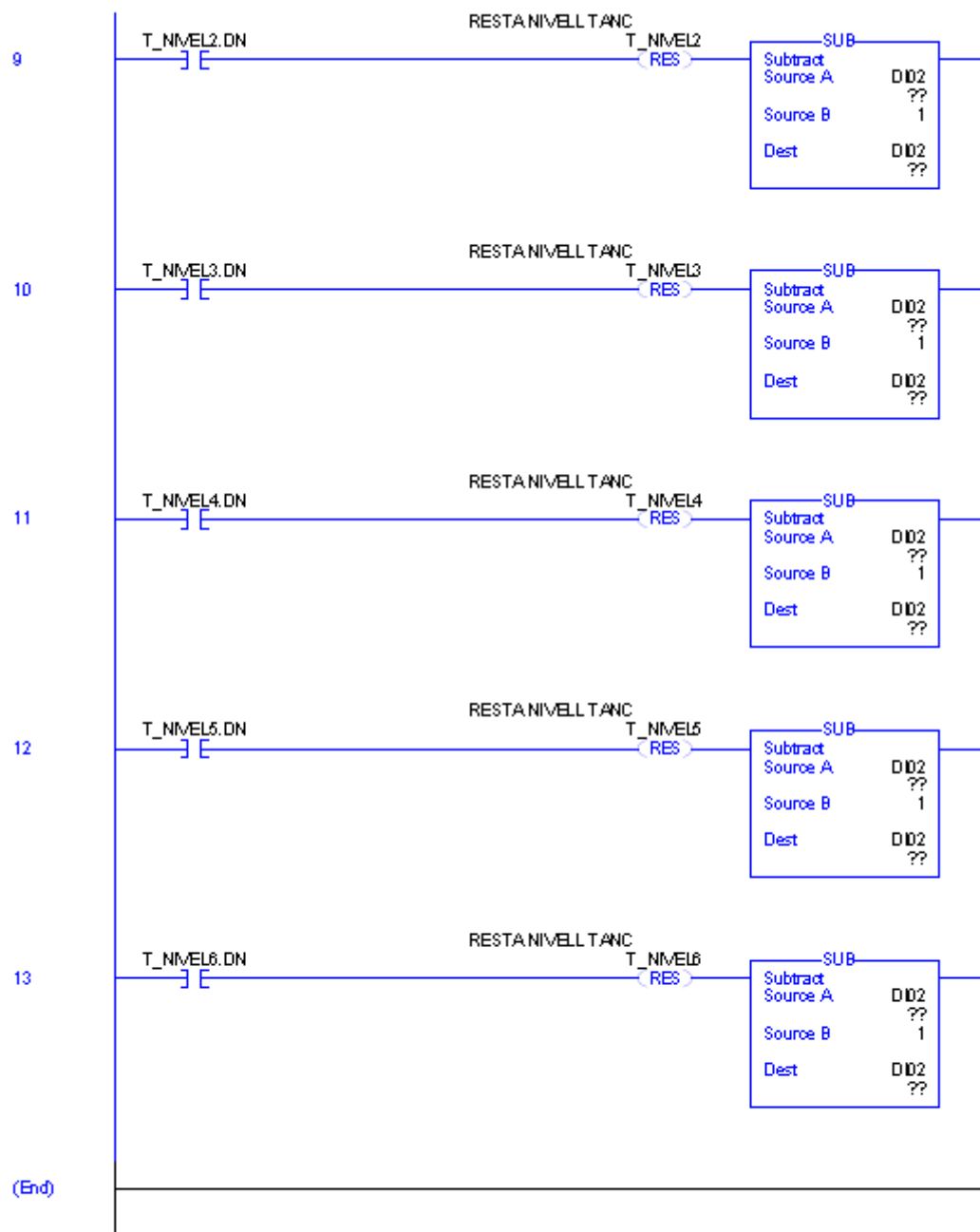
RSLogix 5000



figbo: Add-On Instructions Nivell\_IL\_01 Logic  
 Total number of rungs in routine: 14  
 Data Context: Nivell\_IL\_01 <definition>

Page 211

C:\Documents and Settings\Administrador\Escriptori\figbo.ACI



RST.net 5000

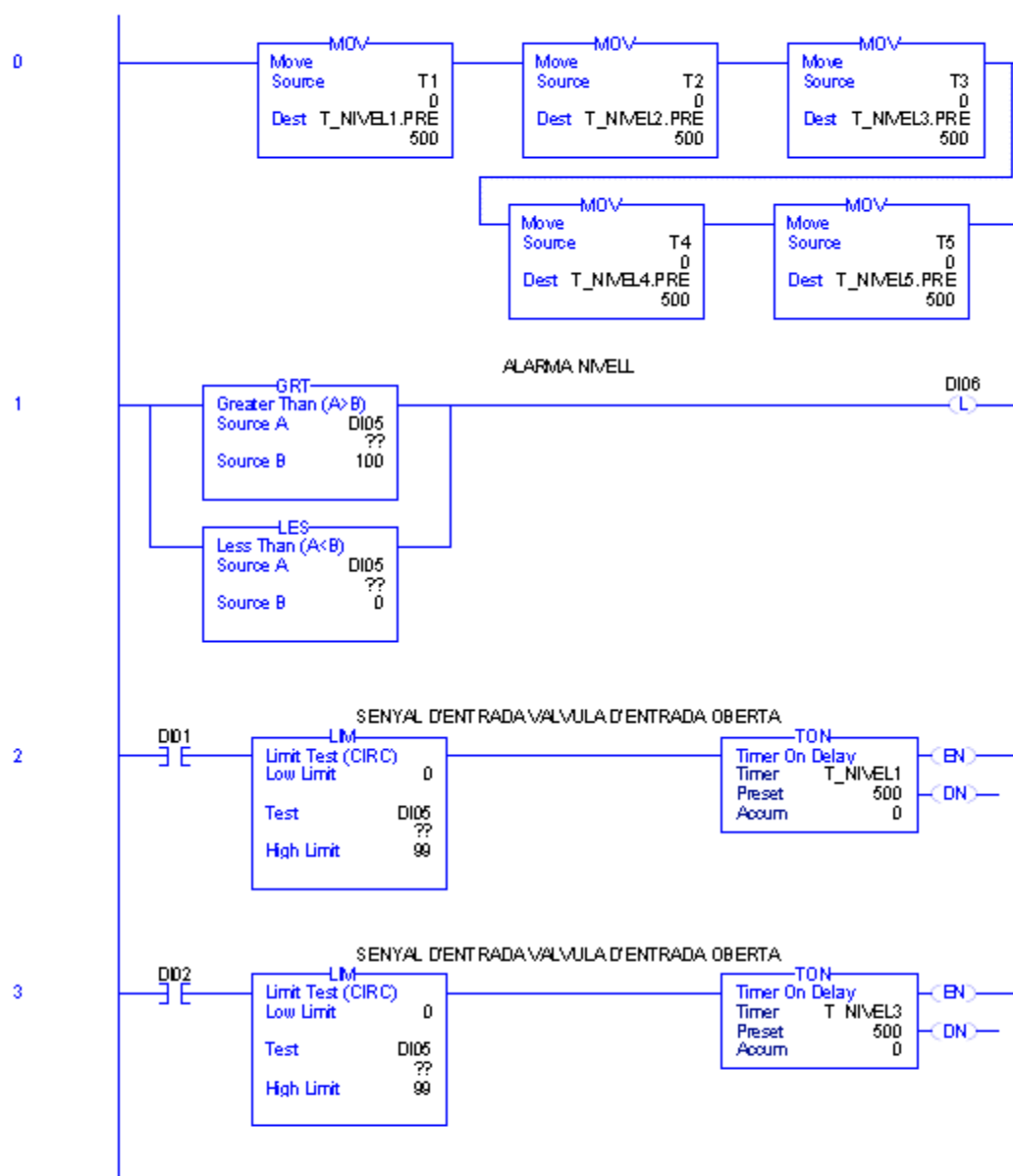
## IL 02

NIVEL\_IL\_02 Instruction Definition - Logic Routine  
 ffigbo: Add-On Instructions Nivell\_IL\_02 Logic  
 Total number of rungs in routine: 12  
 Data Context: Nivell\_IL\_02 <definition>

Page 2/6

01/01/2017 14:20:30

C:\Documents and Settings\Administrador\Escritori\ffigbo.ACD



RSLogix 5000

## Nivell\_IL\_02 Instruction Definition - Logic Routine

figbo: Add-On Instructions Nivell\_IL\_02 Logic

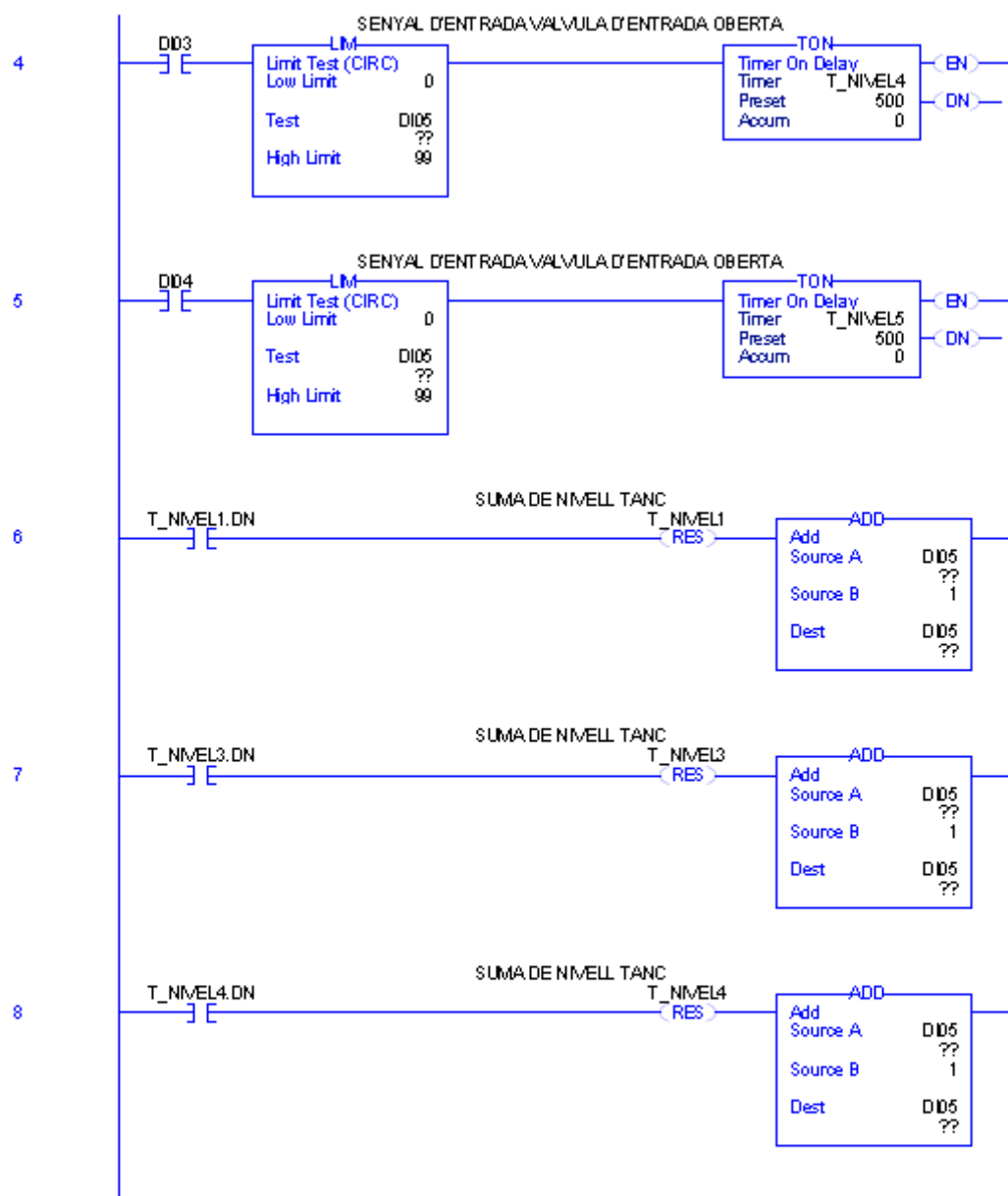
Total number of rungs in routine: 12

Data Context: Nivell\_IL\_02 &lt;definition&gt;

Page 277

01/01/2017 14:20:31

C:\Documents and Settings\Administrador\Escritorio\figbo.ACD

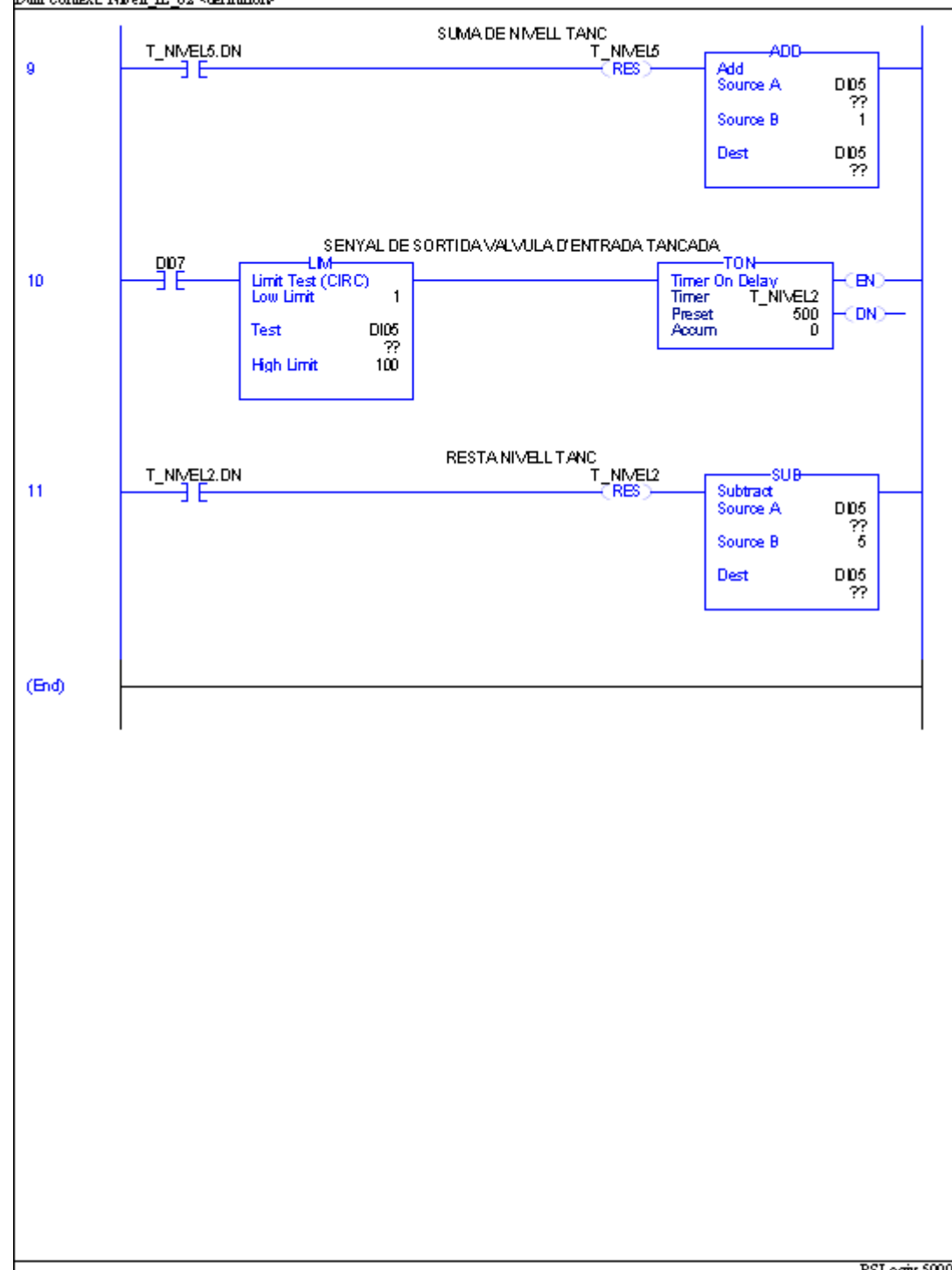


BCT 6000

nivell\_IL\_02 Instruction Definition - Logic Routine  
 ffigbo: Add-On Instructions Nivell\_IL\_02 Logic  
 Total number of rungs in routine: 12  
 Data Context: Nivell\_IL\_02 <definition>

Page 2/8

C:\Documents and Settings\Administrador\Escritori\ffigbo.ACD



## IL 03



Nivell\_IL\_03 Instruction Definition - Logic Routine

Page 2/4

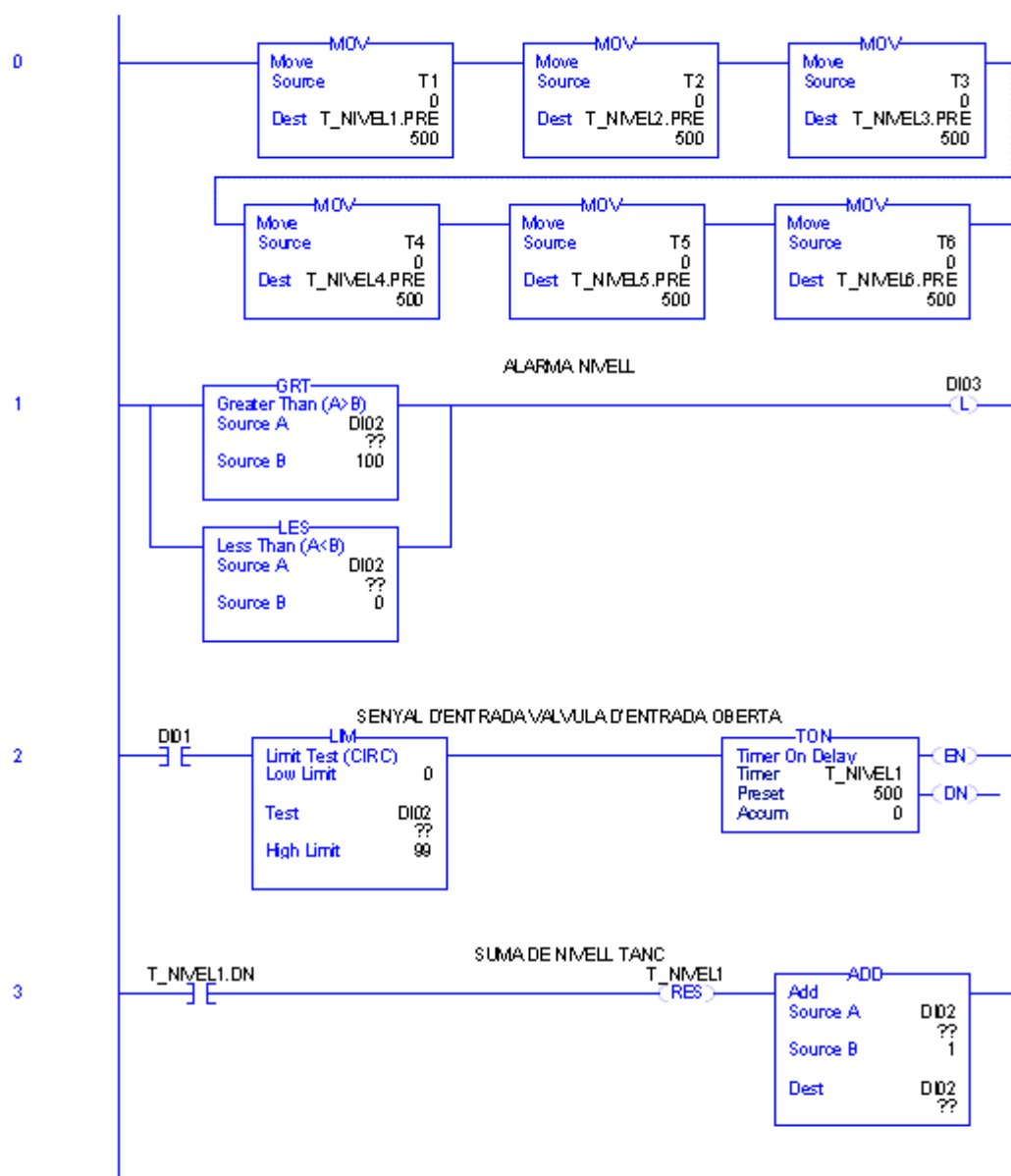
figbo: Add On Instructions Nivell\_IL\_03 Logic

01/01/2017 14:20:32

Total number of rungs in routine: 14

C:\Documents and Settings\Administrador\Escritorio\figbo.ACD

Data Context: Nivell\_IL\_03 &lt;definition&gt;



RSLogix 5000



Nivel\_IL\_03 Instructions: Nivell\_IL\_03.Ladder

Page 2/3

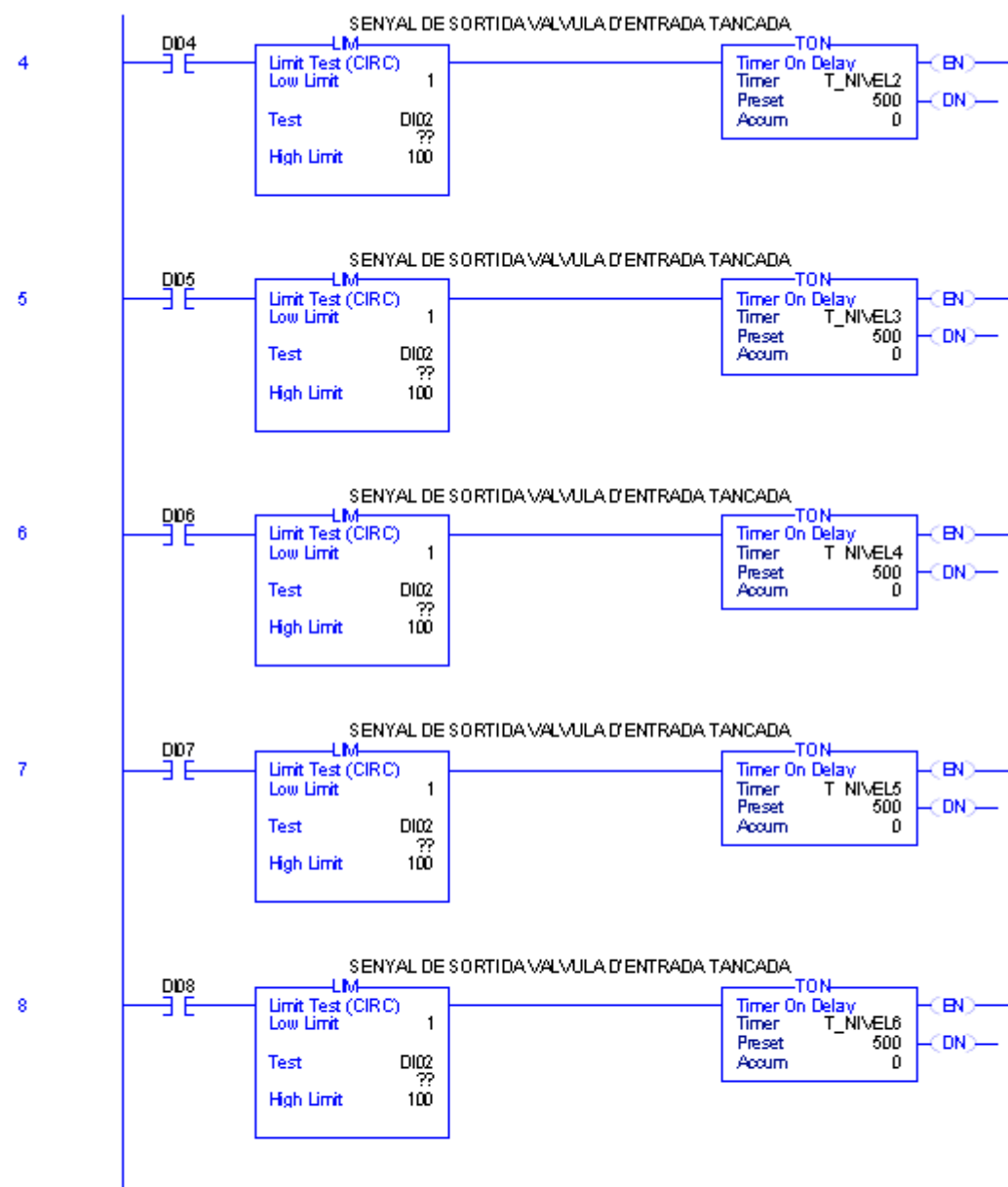
gbo: Add-On Instructions: Nivell\_IL\_03.Ladder

01/01/2017 14:20:33

Total number of rungs in routine: 14

C:\Documents and Settings\Administrador\Escritori\gbo.ACD

Data Context: Nivell\_IL\_03 &lt;definition&gt;

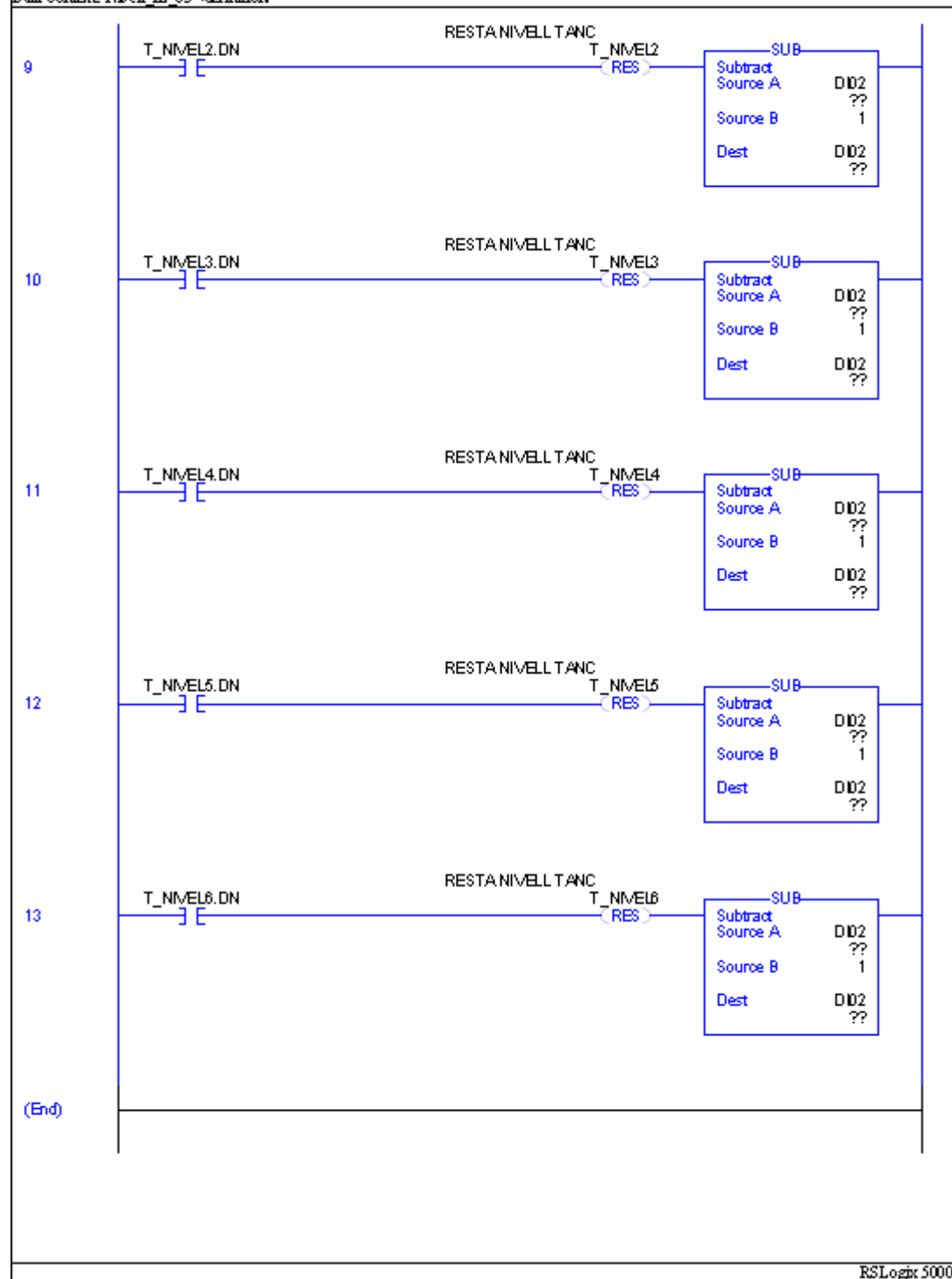


RSLogix 5000

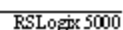
Figbo: Add-On Instructions Nirell\_IL\_03 Logic  
 Total number of rungs in routine: 14  
 Data Context: Nirell\_IL\_03 <definition>

01/01/2017 14:20:34

C:\Documents and Settings\Administrador\Escritorio\Figbo ACD



## **IL 04**



## **IL 05**

RSLogix 5000 - Project: Nivell\_IL\_05 - Page: 274

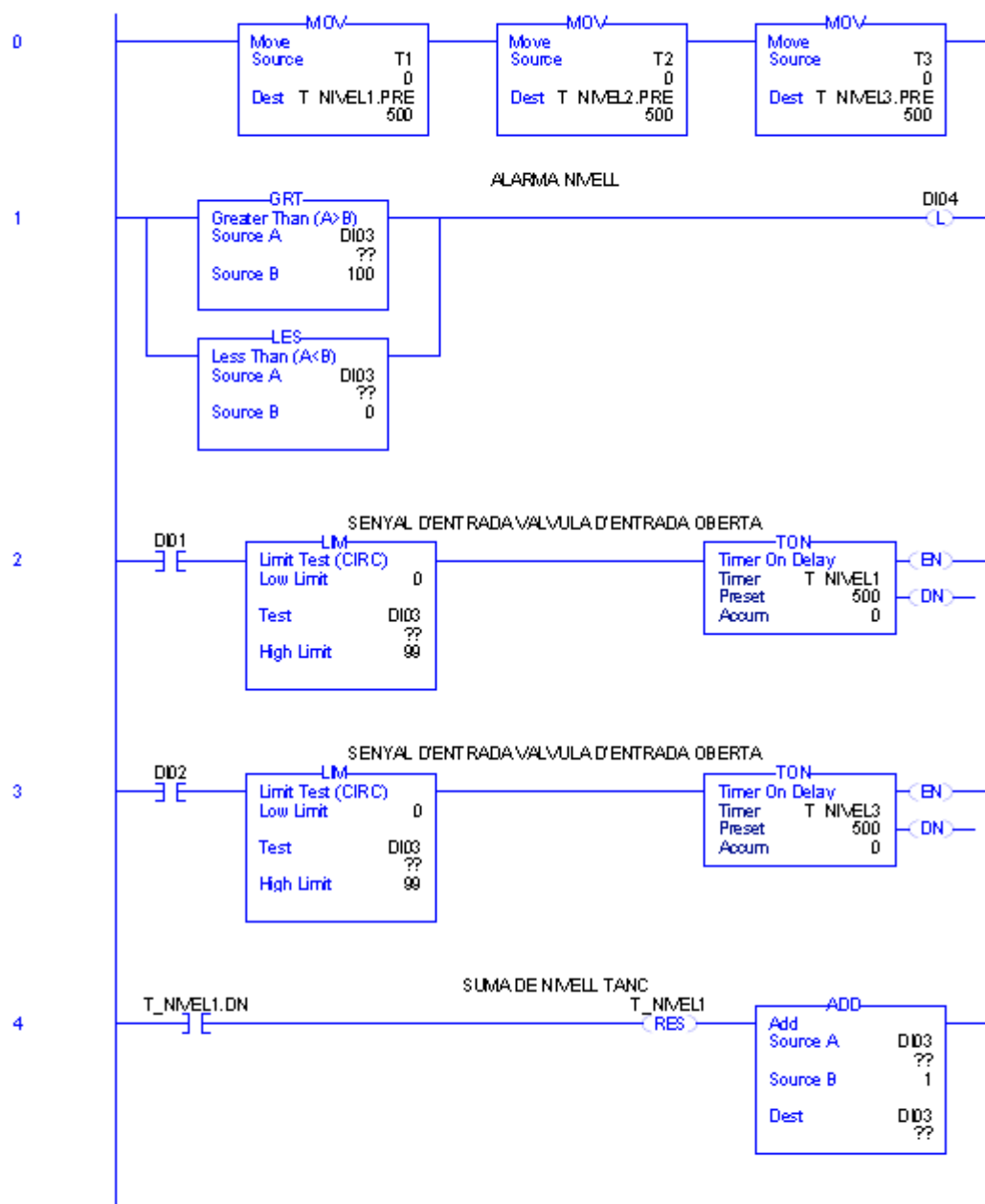
figbo: Add-On Instructions Nivell\_IL\_05 Logic

01/01/2017 14:20:36

Total number of rungs in routine: 8

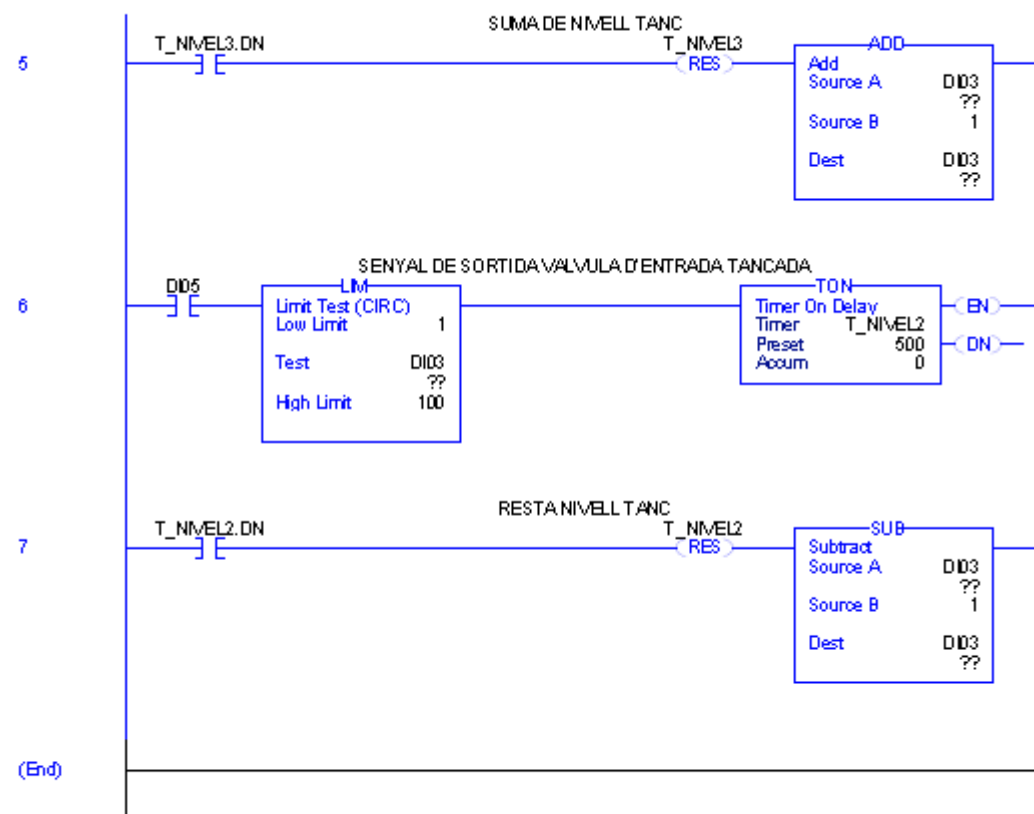
C:\Documents and Settings\Administrador\Escritorio\figbo.ACD

Data Context: Nivell\_IL\_05 <definition>



RSLogix 5000

01/01/2017 14:20:37  
 C:\Documents and Settings\Administrador\Escriptori\figbo.ACD  
 Add-On Instructions Nivell\_IL\_05 Logic  
 total number of rungs in routine: 8  
 data Context: Nivell\_IL\_05 <definition>



RSLogix 5000

## IL 06





NIVEL·LIL·06 INSTRUCTION DEMONSTRATION - Logic Routine

Page 2/3

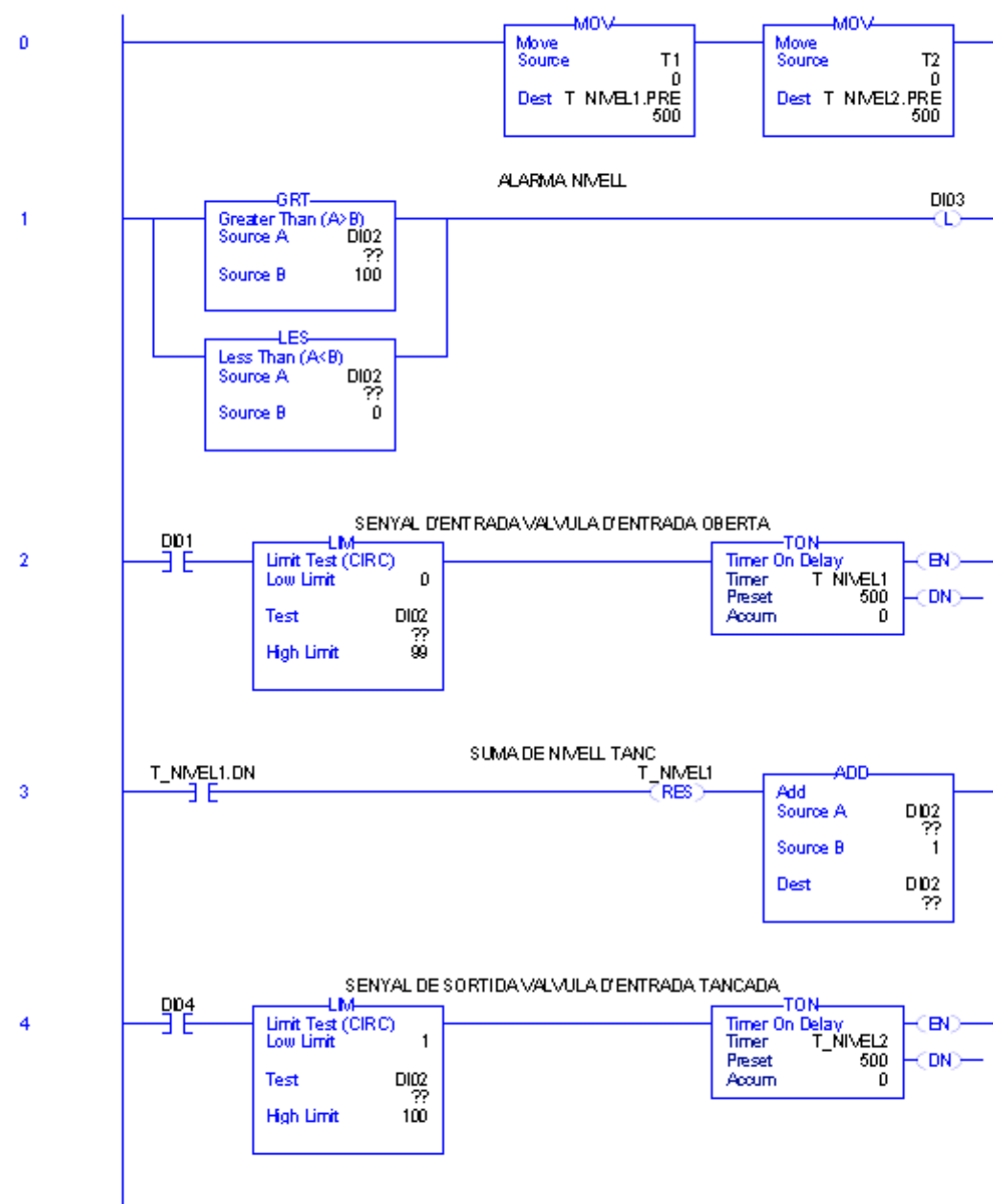
fibo: Add-On Instructions: Nivell\_IL\_06 Logic

01/01/2017 14:20:37

Total number of rungs in routine: 6

C:\Documents and Settings\Administrador\Escritorio\ifibo.ACD

&gt;Data Context: Nivell\_IL\_06 &lt;definitions&gt;



RSLogix 5000

WAGO: Add-On Instructions: Nivell\_IL\_06 Logic

01/01/2017 14:20:38

Total number of rungs in routine: 6

C:\Documents and Settings\Administrador\Escritorio\Wago.ACD

Data Context: Nivell\_IL\_06 <definition>



RST.Ln=6 5000

## IL 07

## Nivell\_IL\_07 Instruction Definition - Logic Routine

figbo: Add-On Instructions Nivell\_IL\_07 Logic

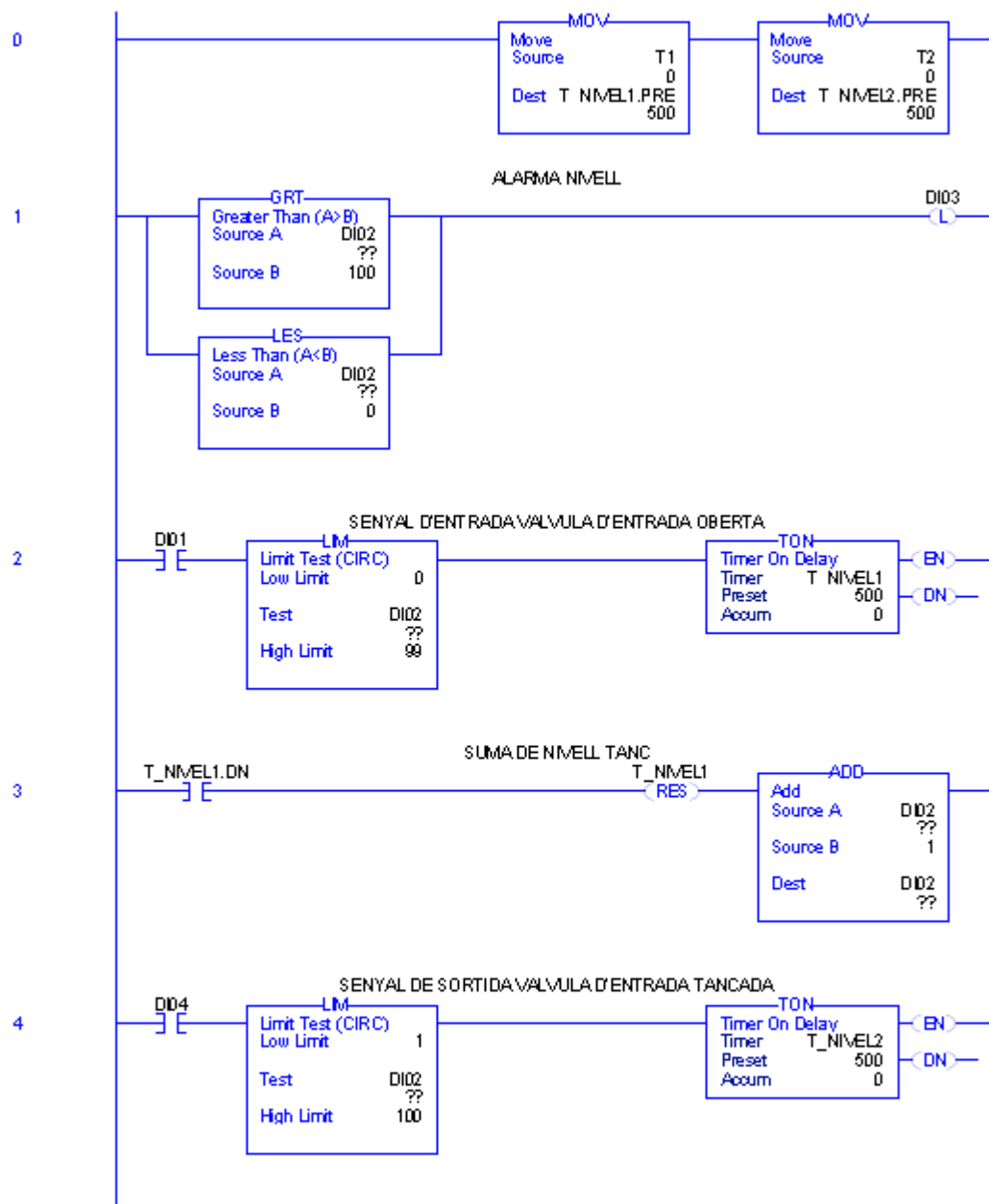
Total number of rungs in routine: 6

Data Context: Nivell\_IL\_07 &lt;definition&gt;

Page 304

01/01/2017 14:20:39

C:\Documents and Settings\Administrador\Escriptori\figbo.ACI



RSLogix 5000

## Nivell\_IL\_07 Instruction Definition - Logic Routine

Page 305

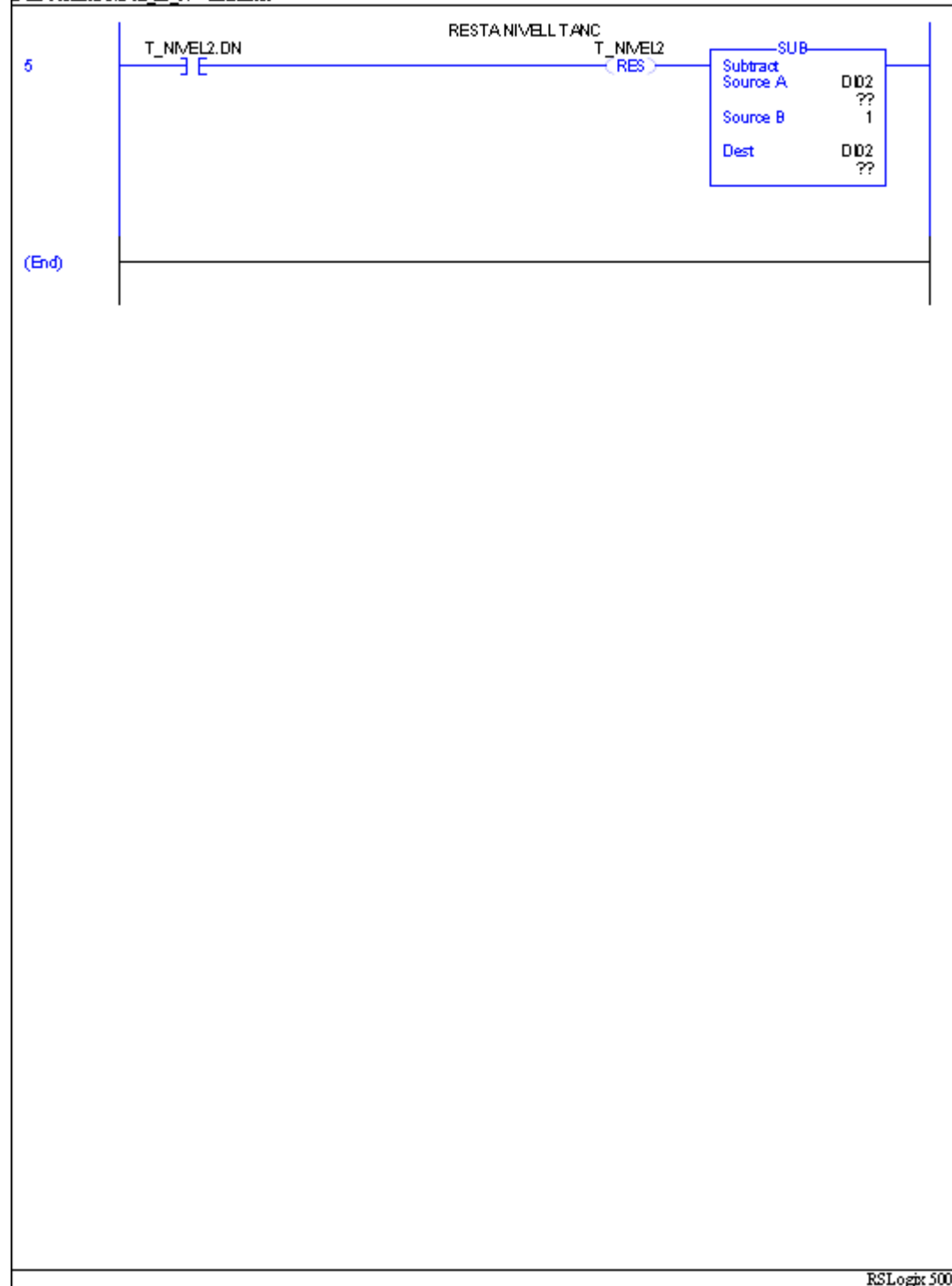
Hgho: Add On Instructions Nivell\_IL\_07 Logic

01/01/2017 14:20:40

Total number of rungs in routine: 6

C:\Documents and Settings\Administrador\Escritorio\Hgho.ACD

Data Context: Nivell\_IL\_07 &lt;definition&gt;



## **IL 08**

## Nivell\_IL\_08 Instruction Definition - Logic Routine

Page 309

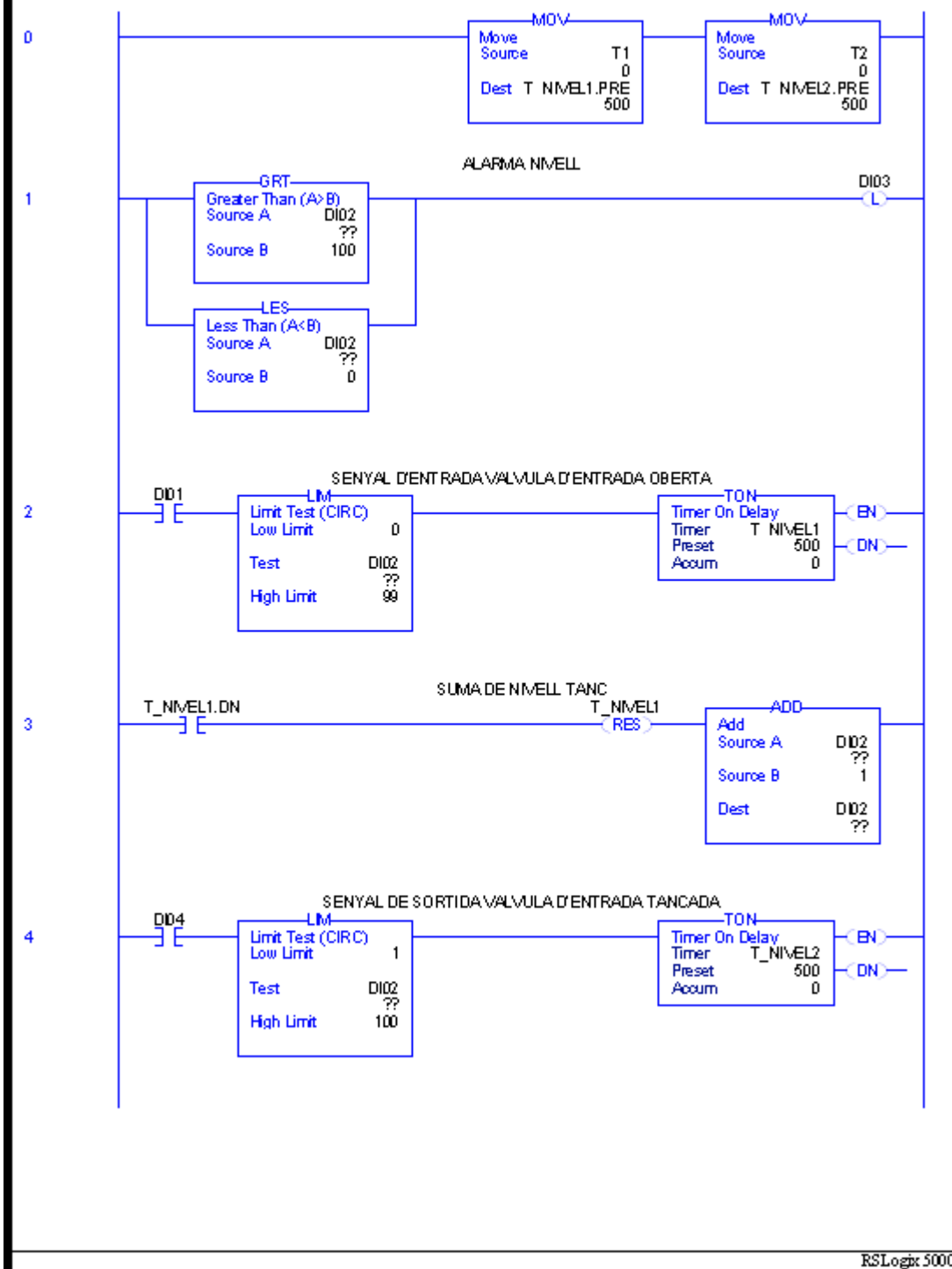
tfgbo: Add-On Instructions: Nivell\_IL\_08 Logic

01/01/2017 14:20:41

Total number of rungs in routine: 6

C:\Documents and Settings\Administrador\Escritorio\tfgbo.ACD

Data Context: Nivell\_IL\_08 &lt;definitions&gt;



ESLogix 5000



Nivell\_IL\_08 Instruction Definition - Logic Routine

Figbo: Add-On Instructions Nivell\_IL\_08 Logic

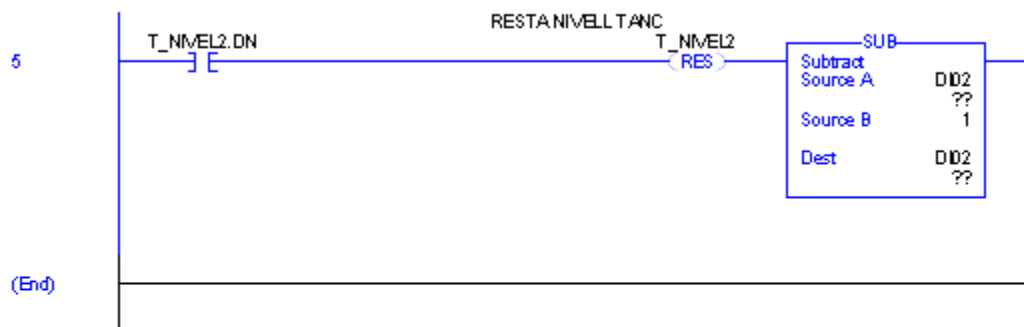
Total number of rungs in routine: 6

Data Context: Nivell\_IL\_08 <definition>

Page 510

01/01/2017 14:20:42

C:\Documents and Settings\Administrador\Escritori\figbo.ACD



EST code 5000

## VÀLVULA TOT/RES

## Valvula\_tot\_res Instruction Definition - Logic Routine

Page 321

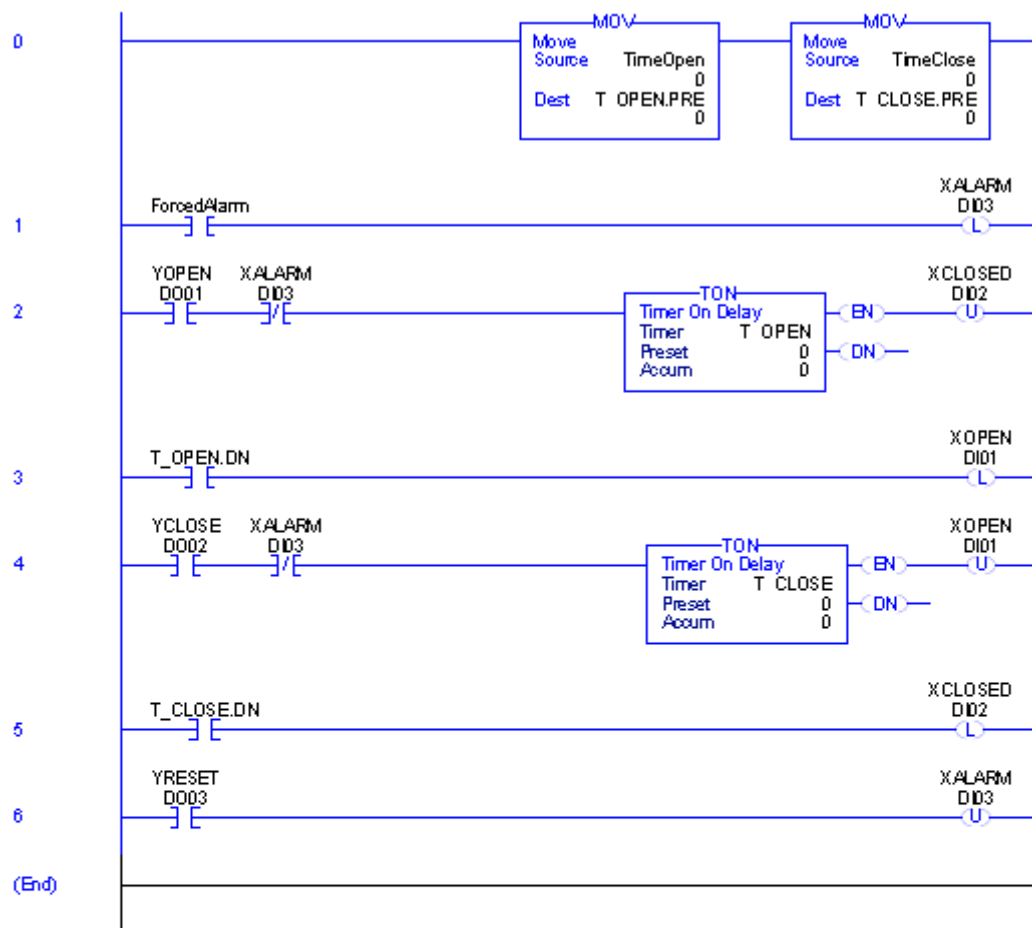
figbo: Add-On Instructions: Valvula\_tot\_res: Logic

01/01/2017 14:20:44

Total number of rungs in routine: 7

C:\Documents and Settings\Administrador\Escritori\figbo.ACD

Data Context: Valvula\_tot\_res &lt;definition&gt;



#### 1.1.5. *Data type*

## ACTUADORS



CC - User-Defined Data type  
fgbo (Controller)




Page 520  
01/01/2017 14:20:47

C:\Documents and Settings\Administrador\Escritorio\fgbo.ACD

Data type Name: AC

Description:  
Tipus Actuator

Size: 44 byte(s)

Name	Data Type	Style	Description	External Access
C_AUTOMATIC	BOOL	Binary	Ordre Automàtic	Read/Write
C_CLOSE	BOOL	Binary	Ordre tancar	Read/Write
C_CLOSE_AUT	BOOL	Binary	Ordre tancar automàtic	Read/Write
C_MANUAL	BOOL	Binary	Ordre manual	Read/Write
C_OPEN	BOOL	Binary	Ordre obrir	Read/Write
C_OPEN_AUT	BOOL	Binary	Ordre obrir automàtic	Read/Write
C_RESET	BOOL	Binary	Ordre reset	Read/Write
C_OSERVICE	BOOL	Binary	Ordre fora de servei	Read/Write
C_SERVEI	BOOL	Binary	Ordre servei	Read/Write
E_ALARM	BOOL	Binary	Estat amb alarmes	Read/Write
E_AUTOMATIC	BOOL	Binary	Estat en automàtic	Read/Write
E_MANUAL	BOOL	Binary	Estat en manual	Read/Write
E_OSERVICE	BOOL	Binary	Estat en fora de servei	Read/Write
E_SERVEI	BOOL	Binary	Estat en servei	Read/Write
A_POSICIO	BOOL	Binary	Alarma posició	Read/Write
KALARM	BOOL	Binary	Senyal alarma elèctrica	Read/Write
YOPEN	BOOL	Binary	Senyal d'ordre obrir	Read/Write
YCLOSE	BOOL	Binary	Senyal d'ordre tancar	Read/Write
YRESET	BOOL	Binary	Senyal reset	Read/Write
 T_CLOSE	TIMER		Temporitzador tancar	Read/Write
 T_OPEN	TIMER		Temporitzador obrir	Read/Write
 T_RESET	TIMER		Temporitzador Senyal reset	Read/Write
KRUNNING	BOOL	Binary		Read/Write
E_RUNNING	BOOL	Binary		Read/Write

RSLogix 5000

## **BOMBES**

### 3- User-Defined Data Type fgbo (Controller)

Page 327

01/01/2017 14:20:47

C:\Documents and Settings\Administrador\Escritorio\fgbo\_ACD

Data type Name: B

Description:  
bombes

Size: 80 byte(s)

Name	Data Type	Style	Description	External Access
E_ALARM	BOOL	Binary	Estat amb alarmes	Read/Write
E_AUTOMATIC	BOOL	Binary	Estat en automàtic	Read/Write
E_OSERVICE	BOOL	Binary	Estat en fora de servei	Read/Write
E_MANUAL	BOOL	Binary	Estat en manual	Read/Write
E_RUNNING	BOOL	Binary	Estat en marxa	Read/Write
E_SERVICE	BOOL	Binary	Estat en servei	Read/Write
E_READY	BOOL	Binary	Estat preparat per funcionar	Read/Write
POWER	REAL	Float	Potència elèctrica	Read/Write
RHOURS	DINT	Decimal	Hores de marxa	Read/Write
THOURS	DINT	Decimal	Hores totals	Read/Write
C_STOP	BOOL	Binary	Ordre d'atur bomba	Read/Write
C_START	BOOL	Binary	Ordre marxa bomba	Read/Write
C_AUTOMATIC	BOOL	Binary	Ordre automàtic	Read/Write
C_MANUAL	BOOL	Binary	Ordre manual	Read/Write
C_OSERVICE	BOOL	Binary	Ordre de fora de servei	Read/Write
C_RUNNING	BOOL	Binary		Read/Write
C_RESET	BOOL	Binary	Ordre reset	Read/Write
C_SERVICE	BOOL	Binary	Ordre servei	Read/Write
C_STOP_AUTO	BOOL	Binary	Ordre atur bomba automàtic	Read/Write
XPOWER	DINT	Decimal	Senyal analògica d'entrada potència elèctrica	Read/Write
XRUNNING	BOOL	Binary	Senyal d'entrada marxa bomba	Read/Write
XALARM	BOOL	Binary	Senyal d'entrada alarma	Read/Write
YSTART	BOOL	Binary	Senyal de sortida marxa bomba	Read/Write
YRESET	BOOL	Binary	Senyal de sortida reset alarmes	Read/Write
T_RUNNING	TIMER		Temporitzador hores de marxa	Read/Write
T_TOTAL	TIMER		Temporitzador hores totals	Read/Write
C_RUNNING	COUNTER		Comptador d'hores marxa	Read/Write
C_TOTAL	COUNTER		Comptador hores totals	Read/Write
YSTOP	BOOL	Binary	Senyal de sortida stop	Read/Write
C_START_AUTO	BOOL	Binary	Ordre start automàtic	Read/Write

RSLogix 5000



## **ESCALFADORS**

**CA - User-Defined Data Type**  
 Wgbo (Controller)

Page 328

01/01/2017 14:20:47

C:\Documents and Settings\Administrador\Escritorio\Wgbo\_ACD

Data type Name: CA

Description:

Size: 44 byte(s)

Name	Data Type	Style	Description	External Access
C_AUTOMATIC	BOOL	Binary	Ordre Automàtic	Read/Write
C_CLOSE	BOOL	Binary	Ordre tancar	Read/Write
C_CLOSE_AUT	BOOL	Binary	Ordre tancar automàtic	Read/Write
C_MANUAL	BOOL	Binary	Ordre manual	Read/Write
C_OPEN	BOOL	Binary	Ordre obrir	Read/Write
C_OPEN_AUT	BOOL	Binary	Ordre obrir automàtic	Read/Write
C_RESET	BOOL	Binary	Ordre reset	Read/Write
C_OSERVICE	BOOL	Binary	Ordre fora de servei	Read/Write
C_SERVEI	BOOL	Binary	Ordre servei	Read/Write
E_ALARM	BOOL	Binary	Estat amb alarmes	Read/Write
E_AUTOMATIC	BOOL	Binary	Estat en automàtic	Read/Write
XRUNNING	BOOL	Binary	Estat tancada	Read/Write
E_MANUAL	BOOL	Binary	Estat en manual	Read/Write
E_RUNNING	BOOL	Binary	Estat en obert	Read/Write
E_OSERVICE	BOOL	Binary	Estat en fora de servei	Read/Write
E_SERVICE	BOOL	Binary	Estat en servei	Read/Write
A_POSICIO	BOOL	Binary	Alarma posició	Read/Write
XALARM	BOOL	Binary	Senyal alarma elèctrica	Read/Write
YOPEN	BOOL	Binary	Senyal d'ordre obrir	Read/Write
YCLOSE	BOOL	Binary	Senyal d'ordre tancar	Read/Write
YRESET	BOOL	Binary	Senyal reset	Read/Write
T_CLOSE	TIMER		Temporitzador tancar	Read/Write
T_OPEN	TIMER		Temporitzador obrir	Read/Write
T_RESET	TIMER		Temporitzador Senyal reset	Read/Write
XOPEN	BOOL	Binary		Read/Write
XCLOSE	BOOL	Binary		Read/Write

RSLogix 5000

## **VÀLVULA REGULADORA**

FCV - FCV - FCV - FCV - FCV  
fibo (Controller)

Page 227  
01/01/2017 14:20:47

C:\Documents and Settings\Administrador\Escritorio\fcvbo.ACI

Data type Name: FCV

Description:  
Tipus vàlvula reguladora

Size: 48 byte(s)

Name	Data Type	Style	Description	External Access
A_POSITION	BOOL	Binary	Alarma de posició	Read/Write
C_POSITION	REAL	Float	Consigna de posició	Read/Write
E_ALARM	BOOL	Binary	Estat amb alarmes	Read/Write
E_AUTOMATIC	BOOL	Binary	Estat en automàtic	Read/Write
E_OSERVICE	BOOL	Binary	Estat en fora de servei	Read/Write
E_MANUAL	BOOL	Binary	Estat en manual	Read/Write
E_SERVICE	BOOL	Binary	Estat en servei	Read/Write
C_POSITION_AUTO	REAL	Float	Consigna de posició en automàtic	Read/Write
C_AUTOMATIC	BOOL	Binary	Ordre d'Automàtic	Read/Write
C_OSERVICE	BOOL	Binary	Ordre de fora de servei	Read/Write
C_MANUAL	BOOL	Binary	Ordre de manual	Read/Write
C_SERVICE	BOOL	Binary	Ordre en servei	Read/Write
C_RESET	BOOL	Binary	Ordre de fora de servei	Read/Write
YPOSITION	REAL	Float	Sinyal de sortida de posició	Read/Write
T_CLOSE	TIMER		Temporitzador de tancar	Read/Write
T_OPEN	TIMER		Temporitzador d'obrir	Read/Write

RST.nbr 5000

## **INDICADOR DE NIVELL**

1.1 - User-Defined Data type  
fibo (Controller)

Page 330

01/01/2017 14:20:47

C:\Documents and Settings\Administrador\Escritorio\fibo.ACD

Data type Name: IT

Description:  
Indicators

Size: 16 byte(s)

Name	Data Type	Style	Description	External Access
E_ALARM	BOOL	Binary	Alarma entrada equip	ReadWrite
MINS	REAL	Float	Mesura	ReadWrite
XMINS	REAL	Float	Seroyal de mesura	ReadWrite
XALARM	BOOL	Binary	Alarma entrada equip	ReadWrite

RSLogix 5000

## **SISTEMA**

PLC ADDRESS - ORDER ADDRESS FROM TYPE  
fgbo(Contoller)

Page 1/1  
01/01/2017 14:20:47

C:\Documents and Settings\Administrador\Escritorio\fgbo ACD

Datatype Name: SISTEMA

Description:

Size: 4 byte(s)

Name	Data Type	Style	Description	External Access
C_AUTOMATIC	BOOL	Binary	Ordre sistema automàtic	Read/Write
C_MANUAL	BOOL	Binary	Ordre sistema manual	Read/Write
C_MARKA_AUT	BOOL	Binary	Ordre marca en automàtic	Read/Write
C_STOP_AUT	BOOL	Binary	Ordre stop automàtic	Read/Write
C_RESET	BOOL	Binary	Ordre reset	Read/Write
E_AUTOMATIC	BOOL	Binary	Estat en automàtic	Read/Write
E_MANUAL	BOOL	Binary	Estat en manual	Read/Write
E_MARKA	BOOL	Binary	Estat en marca	Read/Write
C_RESET_ALARM	BOOL	Binary	Ordre reset de les alarmes	Read/Write
C_ATUR	BOOL	Binary	Ordre paro d'emergència	Read/Write
E_OSERVICE	BOOL	Binary	Estat fora servei	Read/Write
E_SERVICE	BOOL	Binary	Estat servei	Read/Write
E_RESET	BOOL	Binary		Read/Write
C_MARKA	BOOL	Binary		Read/Write
C_ATUR_EMERGENCIA	BOOL	Binary		Read/Write
E_ATUR_EMERGENCIA	BOOL	Binary		Read/Write

ESLogix 5000



## **VÀLVULA TOT/RES**

# V - User-Defined Data Type Vfibo (Controller)

Page 332

01/01/2017 14:20:47

C:\Documents and Settings\Administrador\Escritorio\Vfibo\_A.CD

Data type Name: V

Description:  
Válvula totales

Size: 44 byte(s)

Name	Data Type	Style	Description	External Access
C_AUTOMATIC	BOOL	Binary	Ordre automàtic	Read/Write
C_CLOSE	BOOL	Binary	Ordre tancar	Read/Write
C_CLOSE_AUT	BOOL	Binary	Ordre tancar automàtic	Read/Write
C_MANUAL	BOOL	Binary	Ordre manual	Read/Write
C_OPEN	BOOL	Binary	Ordre obrir	Read/Write
C_OPEN_AUT	BOOL	Binary	Ordre obrir automàtic	Read/Write
C_RESET	BOOL	Binary	Ordre reset	Read/Write
C_OSERVICE	BOOL	Binary	Ordre fora de servei	Read/Write
C_SERVEI	BOOL	Binary	Ordre servei	Read/Write
E_ALARM	BOOL	Binary	Estat amb alarmes	Read/Write
E_AUTOMATIC	BOOL	Binary	Estat en automàtic	Read/Write
E_CLOSED	BOOL	Binary	Estat tancada	Read/Write
E_MANUAL	BOOL	Binary	Estat en manual	Read/Write
E_OPEN	BOOL	Binary	Estat oberta	Read/Write
E_OSERVICE	BOOL	Binary	Estat en fora de servei	Read/Write
E_SERVICE	BOOL	Binary	Estat en servei	Read/Write
A_POSICIO	BOOL	Binary	Alarma posició	Read/Write
E_FCO	BOOL	Binary	Estat final de cursa obert	Read/Write
E_FCT	BOOL	Binary	Estat final de cursa tancat	Read/Write
XOPEN	BOOL	Binary	Senyal final de cursa obert	Read/Write
XCLOSED	BOOL	Binary	Senyal final de cursa tancada	Read/Write
XALARM	BOOL	Binary	Senyal alarma elèctrica	Read/Write
YOPEN	BOOL	Binary	Senyal ordre d'obrir	Read/Write
YCLOSE	BOOL	Binary	Senyal ordre tancar	Read/Write
YRESET	BOOL	Binary	Senyal reset	Read/Write
T_CLOSE	TIMER		Temporitzador obrir	Read/Write
T_OPEN	TIMER		Temporitzador tancar	Read/Write
T_RESET	TIMER		Temporitzador senyal de reset	Read/Write
E_RESET	BOOL	Binary	RESET	Read/Write

RSLogix 5000

